

Congruence Of Triangles

Exercise 7.1

Question 1:

Complete the following statements:

- (a) Two line segments are congruent if _____.
- (b) Among two congruent angles, one has a measure of 70° ; the measure of the other angle is _____.
- (c) When we write $\angle A = \angle B$, we actually mean _____.

Answer:

- (a) They have the same length
- (b) 70°
- (c) $m \angle A = m \angle B$

Question 2:

Give any two real-life examples for congruent shapes.

Answer:

- (i) Sheets of same letter pad
- (ii) Biscuits in the same packet

Question 3:

If $\triangle ABC \cong \triangle FED$ under the correspondence $ABC \leftrightarrow FED$, write all the Corresponding congruent parts of the triangles.

Answer:

If these triangles are congruent, then the corresponding angles and sides will be equal to each other.

$$\angle A \leftrightarrow \angle F$$

$$\angle B \leftrightarrow \angle E$$

$$\angle C \leftrightarrow \angle D$$

$$\overline{AB} \leftrightarrow \overline{FE}$$

$$\overline{BC} \leftrightarrow \overline{ED}$$

$$\overline{CA} \leftrightarrow \overline{DF}$$

Question 4:

If $\triangle DEF \cong \triangle BCA$, write the part(s) of $\triangle BCA$ that correspond to

(i) $\angle E$ (ii) \overline{EF} (iii) $\angle F$ (iv) \overline{DF}

Answer:

(i) $\angle C$

(ii) \overline{CA}

(iii) $\angle A$

(iv) \overline{BA}

Exercise 7.2

Question 1:

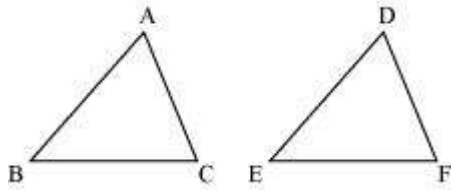
Which congruence criterion do you use in the following?

(a) **Given:** $AC = DF$

$$AB = DE$$

$$BC = EF$$

So, $\triangle ABC \cong \triangle DEF$

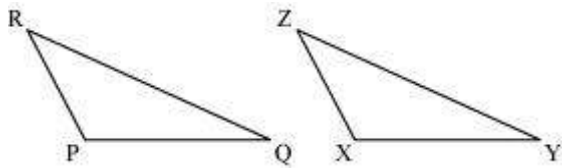


(b) **Given:** $ZX = RP$

$$RQ = ZY$$

$$\angle PRQ = \angle XZY$$

So, $\triangle PQR \cong \triangle XYZ$

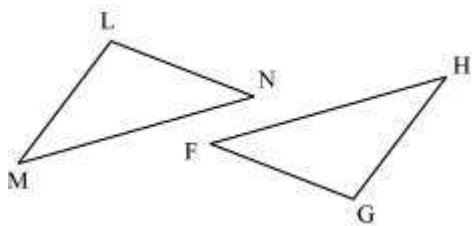


(c) **Given:** $\angle MLN = \angle FGH$

$$\angle NML = \angle GFH$$

$$ML = FG$$

So, $\triangle LMN \cong \triangle FGH$

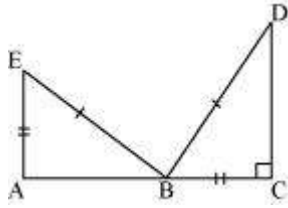


(d) **Given:** $EB = DB$

$$AE = BC$$

$$\angle A = \angle C = 90^\circ$$

So, $\triangle ABE \cong \triangle CDB$



Answer:

- (a) SSS, as the sides of $\triangle ABC$ are equal to the sides of $\triangle DEF$.
- (b) SAS, as two sides and the angle included between these sides of $\triangle PQR$ are equal to two sides and the angle included between these sides of $\triangle XYZ$.
- (c) ASA, as two angles and the side included between these angles of $\triangle LMN$ are equal to two angles and the side included between these angles of $\triangle GFH$.
- (d) RHS, as in the given two right-angled triangles, one side and the hypotenuse are respectively equal.

Question 2:

You want to show that $\triangle ART \cong \triangle PEN$,

(a) If you have to use SSS criterion, then you need to show

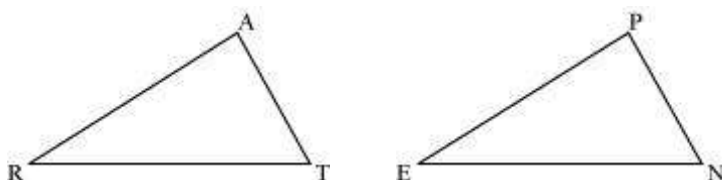
(i) $AR =$ (ii) $RT =$ (iii) $AT =$

(b) If it is given that $\angle T = \angle N$ and you are to use SAS criterion, you need to have

(i) $RT =$ and (ii) $PN =$

(c) If it is given that $AT = PN$ and you are to use ASA criterion, you need to have

(i) ? (ii) ?



Answer:

(a)

(i) $AR = PE$

(ii) $RT = EN$

(iii) $AT = PN$

(b)

(i) $RT = EN$

(ii) $PN = AT$

(c)

(i) $\angle ATR = \angle PNE$

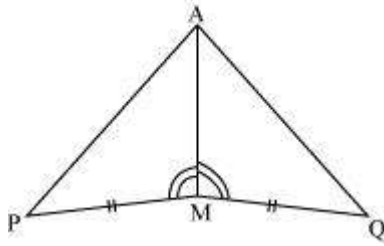
(ii) $\angle RAT = \angle EPN$

Question 3:

You have to show that $\triangle AMP \cong \triangle AMQ$.

In the following proof, supply the missing reasons.

-	Steps	-	Reasons
(i)	$PM = QM$	(i)	...
(ii)	$\angle PMA = \angle QMA$	(ii)	...
(iii)	$AM = AM$	(iii)	...
(iv)	$\triangle AMP \cong \triangle AMQ$	(iv)	...



Answer:

(i) Given

(ii) Given

(iii) Common

(iv) SAS, as the two sides and the angle included between these sides of $\triangle AMP$ are equal to two sides and the angle included between these sides of $\triangle AMQ$.

Question 4:

In $\triangle ABC$, $\angle A = 30^\circ$, $\angle B = 40^\circ$ and $\angle C = 110^\circ$

In $\triangle PQR$, $\angle P = 30^\circ$, $\angle Q = 40^\circ$ and $\angle R = 110^\circ$

A student says that $\triangle ABC \cong \triangle PQR$ by AAA congruence criterion. Is he justified? Why or why not?

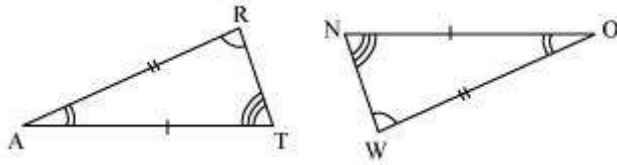
Answer:

No. This property represents that these triangles have their respective angles of equal measure. However, this gives no information about their sides. The sides of these triangles have a ratio somewhat different than 1:1. Therefore, AAA property does not prove the two triangles congruent.

Question 5:

In the figure, the two triangles are congruent.

The corresponding parts are marked. We can write $\triangle RAT \cong ?$



Answer:

It can be observed that,

$$\angle RAT = \angle WON$$

$$\angle ART = \angle OWN$$

$$AR = OW$$

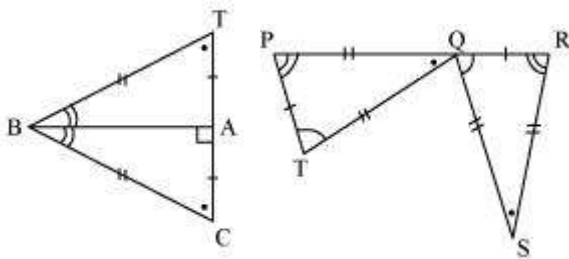
Therefore, $\triangle RAT \cong \triangle WON$, by ASA criterion.

Question 6:

Complete the congruence statement:

$$\triangle BCA \cong ?$$

$$\triangle QRS \cong ?$$



Answer:

Given that, $BC = BT$

$$TA = CA$$

BA is common.

Therefore, $\triangle BCA \cong \triangle BTA$

Similarly, $PQ = RS$

$TQ = QS$

$PT = RQ$

Therefore, $\triangle QRS \cong \triangle TPQ$

Question 7:

In a squared sheet, draw two triangles of equal areas such that

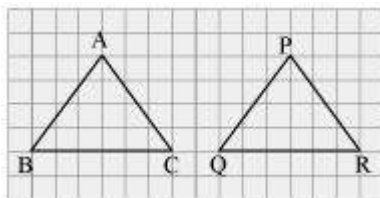
(i) The triangles are congruent.

(ii) The triangles are not congruent.

What can you say about their perimeters?

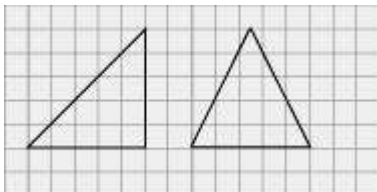
Answer:

(i)



Here, $\triangle ABC$ and $\triangle PQR$ have the same area and are congruent to each other also. Also, the perimeter of both the triangles will be the same.

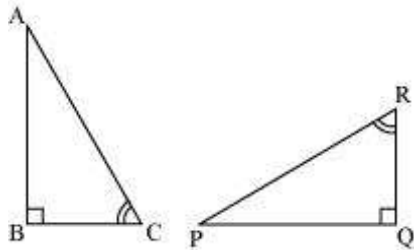
(ii)



Here, the two triangles have the same height and base. Thus, their areas are equal. However, these triangles are not congruent to each other. Also, the perimeter of both the triangles will not be the same.

Question 9:

If $\triangle ABC$ and $\triangle PQR$ are to be congruent, name one additional pair of corresponding parts. What criterion did you use?



Answer:

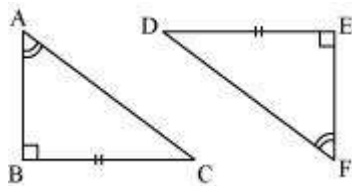
$$BC = QR$$

$$\triangle ABC \cong \triangle PQR \text{ (ASA criterion)}$$

Question 10:

Explain, why

$$\triangle ABC \cong \triangle FED$$



Answer:

$$\text{Given that, } \angle ABC = \angle FED \text{ (1)}$$

$$\angle BAC = \angle EFD \text{ (2)}$$

The two angles of $\triangle ABC$ are equal to the two respective angles of $\triangle FED$. Also, the sum of all interior angles of a triangle is 180° . Therefore, third angle of both triangles will also be equal in measure.

$$\angle BCA = \angle EDF \text{ (3)}$$

Also, given that, $BC = ED$ (4)

By using equation (1), (3), and (4), we obtain

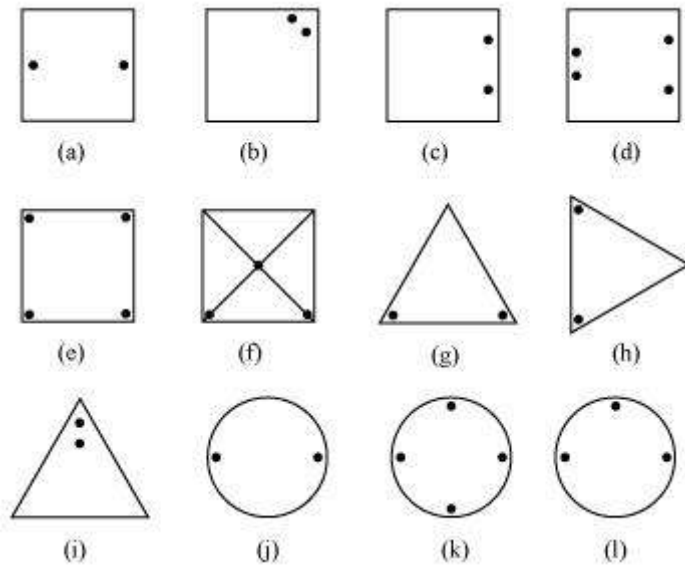
$$\triangle ABC \cong \triangle FED \text{ (ASA criterion)}$$

Symmetry

Exercise 14.1

Question 1:

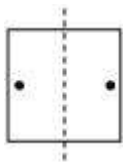
Copy the figures with punched holes and find the axes of symmetry for the following:



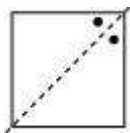
Answer:

The axes of symmetry in the given figures are as follows.

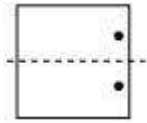
(a)



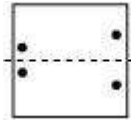
(b)



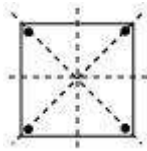
(c)



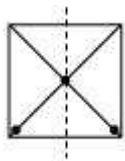
(d)



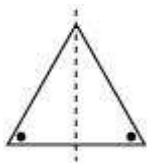
(e)



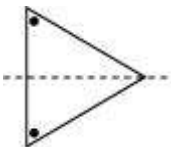
(f)



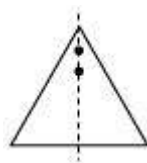
(g)



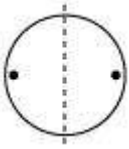
(h)



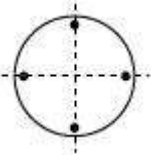
(i)



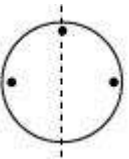
(j)



(k)

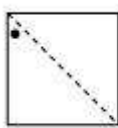


(l)

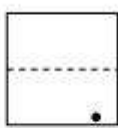


Question 2:

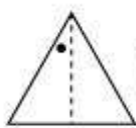
Given the line(s) of symmetry, find the other hole(s):



(a)



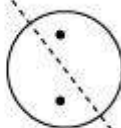
(b)



(c)



(d)



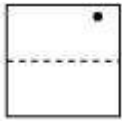
(e)

Answer:

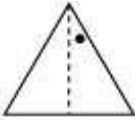
(a)



(b)



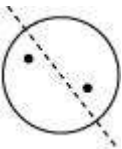
(c)



(d)

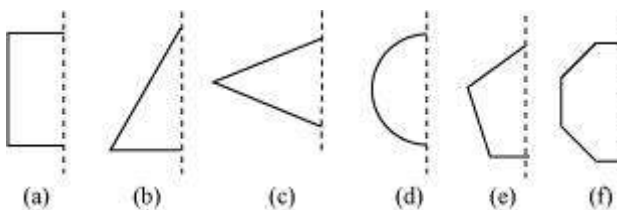


(e)



Question 3:

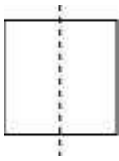
In the following figures, the mirror line (i.e., the line of symmetry) is given as a dotted line. Complete each figure performing reflection in the dotted (mirror) line. (You might perhaps place a mirror along the dotted line and look into the mirror for the image). Are you able to recall the name of the figure you complete?



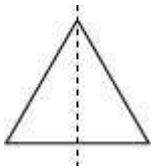
Answer:

The given figures can be completed as follows.

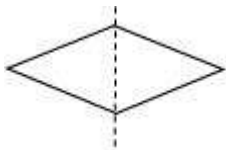
(a) It will be a square.



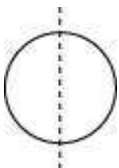
(b) It will be a triangle.



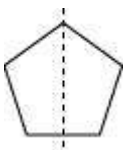
(c) It will be a rhombus.



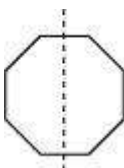
(d) It will be a circle.



(e) It will be a pentagon.

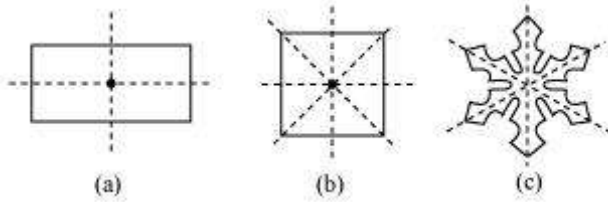


(f) It will be an octagon.

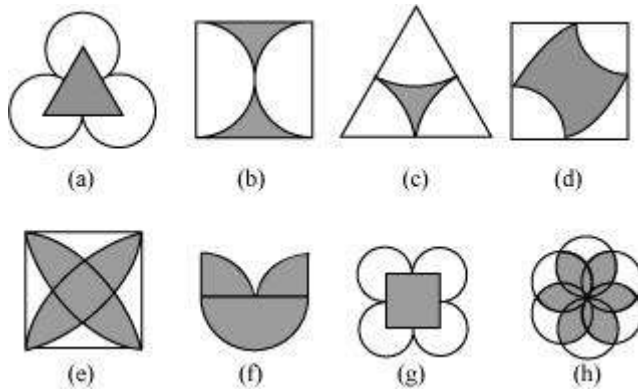


Question 4:

The following figures have more than one line of symmetry. Such figures are said to have multiple lines of symmetry.

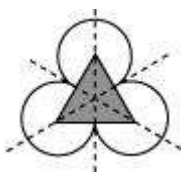


Identify multiple lines of symmetry, if any, in each of the following figures:

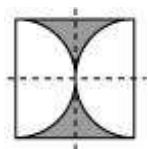


Answer:

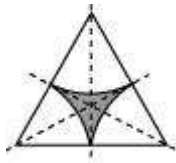
(a) The given figure has 3 lines of symmetry. Hence, it has multiple lines of symmetry.



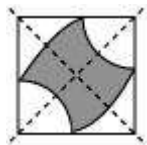
(b) The given figure has 2 lines of symmetry. Hence, it has multiple lines of symmetry.



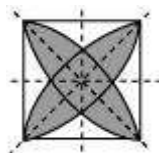
(c) The given figure has 3 lines of symmetry. Hence, it has multiple lines of symmetry.



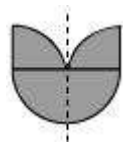
(d) The given figure has 2 lines of symmetry. Hence, it has multiple lines of symmetry.



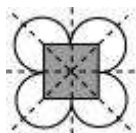
(e) The given figure has 4 lines of symmetry. Hence, it has multiple lines of symmetry.



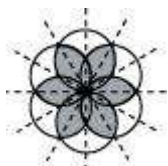
(f) The given figure has only 1 line of symmetry.



(g) The given figure has 4 lines of symmetry. Hence, it has multiple lines of symmetry.

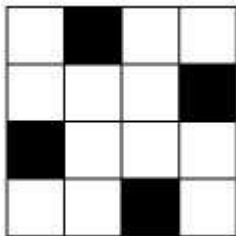


(h) The given figure has 6 lines of symmetry. Hence, it has multiple lines of symmetry.



Question 5:

Copy the figure given here.

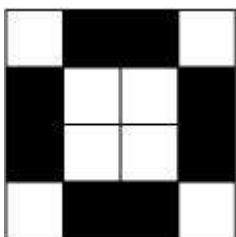


Take any one diagonal as a line of symmetry and shade a few more squares to make the figure symmetric about a diagonal. Is there more than one way to do that? Will the figure be symmetric about both the diagonals?

Answer:

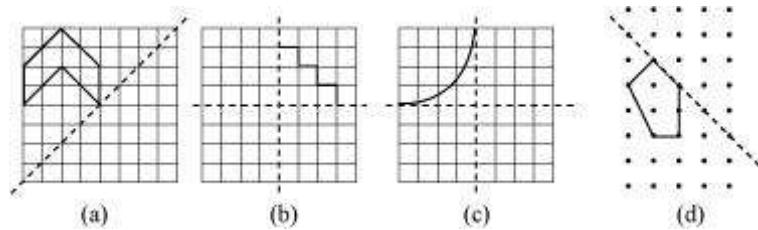
We can shade a few more squares so as to make the given figure symmetric about any of its diagonals.

Yes, the figure is symmetric about both the diagonals. There is more than one way so as to make the figure symmetric about a diagonal as we can choose any of its 2 diagonals.



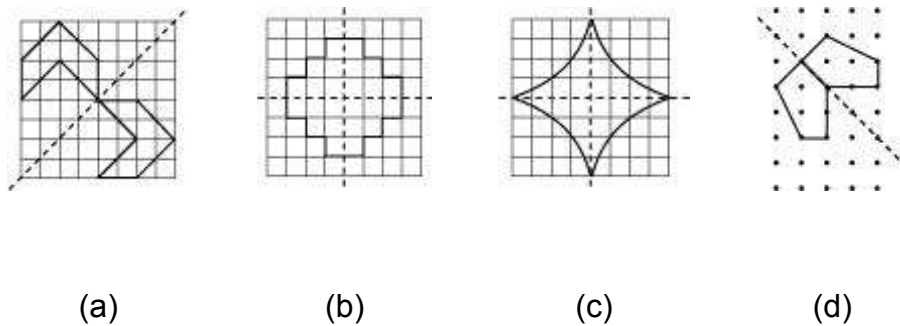
Question 6:

Copy the diagram and complete each shape to be symmetric about the mirror line (s):



Answer:

The given figures can be completed about the given mirror lines as follows.



Question 7:

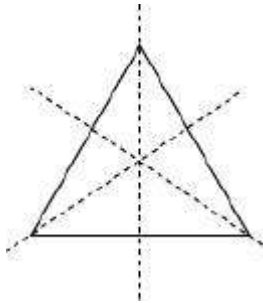
State the number of lines of symmetry for the following figures:

- (a) An equilateral triangle
- (b) An isosceles triangle
- (c) A scalene triangle
- (d) A square
- (e) A rectangle
- (f) A rhombus
- (g) A parallelogram
- (h) A quadrilateral
- (i) A regular hexagon

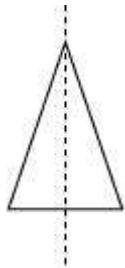
(j) A circle

Answer:

(a) There are 3 lines of symmetry in an equilateral triangle.



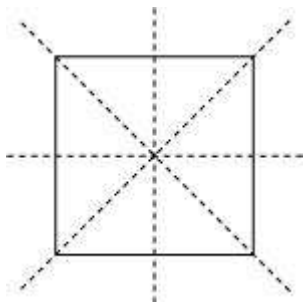
(b) There is only 1 line of symmetry in an isosceles triangle.



(c) There is no line of symmetry in a scalene triangle.



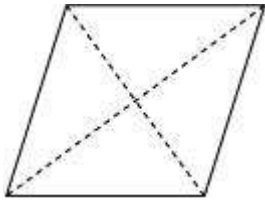
(d) There are 4 lines of symmetry in a square.



(e) There are 2 lines of symmetry in a rectangle.



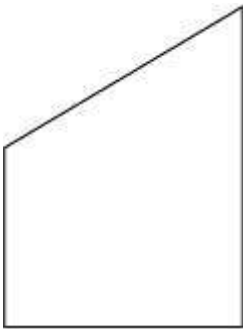
(f) There are 2 lines of symmetry in a rhombus.



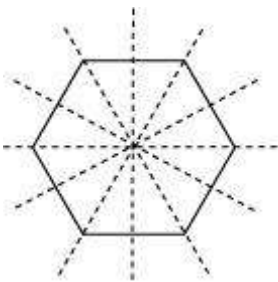
(g) There is no line of symmetry in a parallelogram.



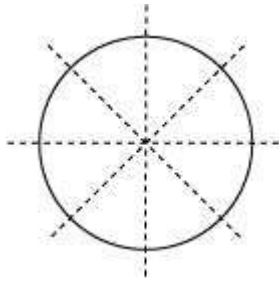
(h) There is no line of symmetry in a quadrilateral.



(i) There are 6 lines of symmetry in a regular hexagon.



(j) There are infinite lines of symmetry in a circle. Some of these are represented as follows.



Question 8:

What letters of the English alphabet have reflectional symmetry (i.e., symmetry related to mirror reflection) about.

- (a) a vertical mirror**
- (b) a horizontal mirror**
- (c) both horizontal and vertical mirrors**

Answer:

(a) A, H, I, M, O, T, U, V, W, X, Y are the letters having a reflectional symmetry about a vertical mirror.



V W X

Y

(b) B, C, D, E, H, I, K, O, X are the letters having a reflectional symmetry about a horizontal mirror.

B C D

E H I

K O X

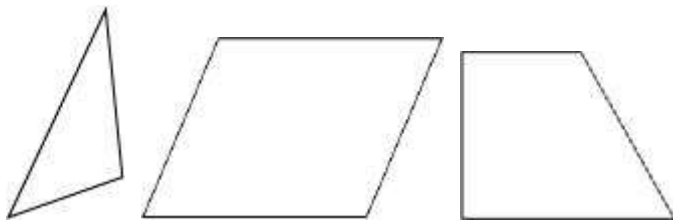
(c) H, I, O, X are the letters having a reflectional symmetry about both the vertical mirror and the horizontal mirror.

H I O X

Give three examples of shapes with no line of symmetry.

Answer:

A scalene triangle, a parallelogram, and a trapezium do not have any line of symmetry.



Question 10:

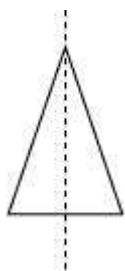
What other name can you give to the line of symmetry of

(a) an isosceles triangle?

(b) a circle?

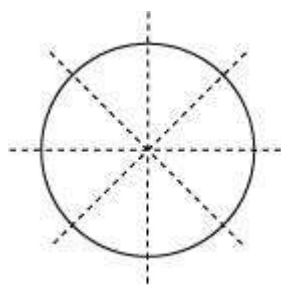
Answer:

(a) An isosceles triangle has only 1 line of symmetry.



Therefore, this line of symmetry is the median and also the altitude of this isosceles triangle.

(b) There are infinite lines of symmetry in a circle. Some of these are represented as follows.

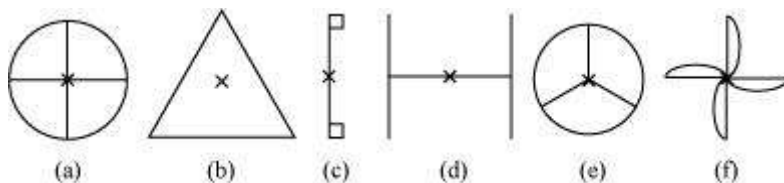


It can be concluded that each line of symmetry is the diameter for this circle.

Exercise 14.2

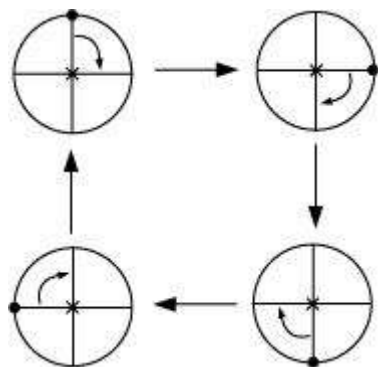
Question 1:

Which of the following figures have rotational symmetry of order more than 1:

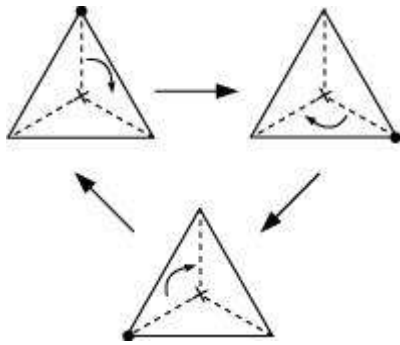


Answer:

(a) The given figure has its rotational symmetry as 4.

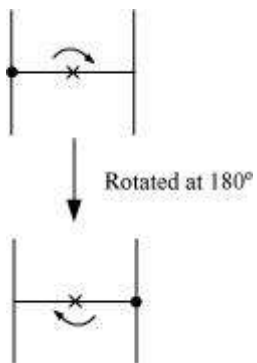


(b) The given figure has its rotational symmetry as 3.

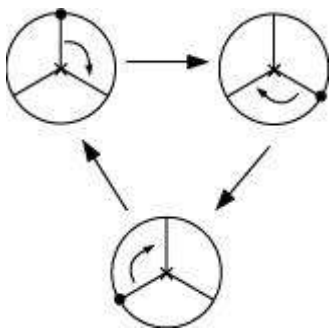


(c) The given figure has its rotational symmetry as 1.

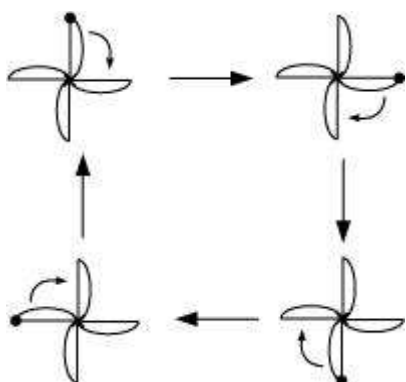
(d) The given figure has its rotational symmetry as 2.



(e) The given figure has its rotational symmetry as 3.



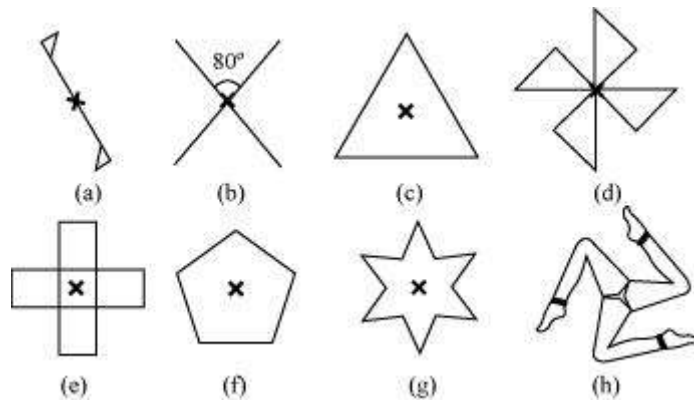
(f) The given figure has its rotational symmetry as 4.



Hence, figures (a), (b), (d), (e), and (f) have rotational symmetry of order more than 1.

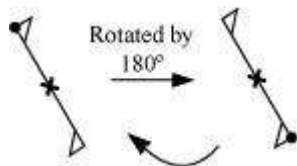
Question 2:

Give the order of rotational symmetry for each figure:

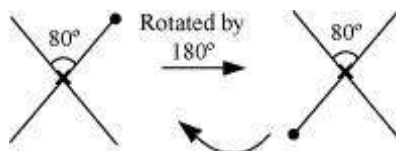


Answer:

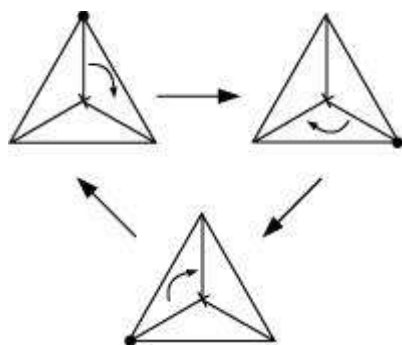
(a) The given figure has its rotational symmetry as 2.



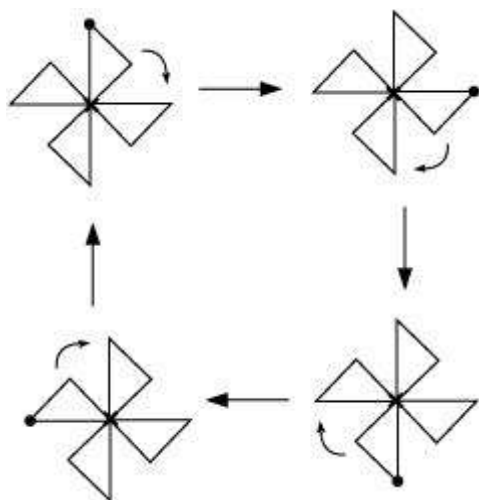
(b) The given figure has its rotational symmetry as 2.



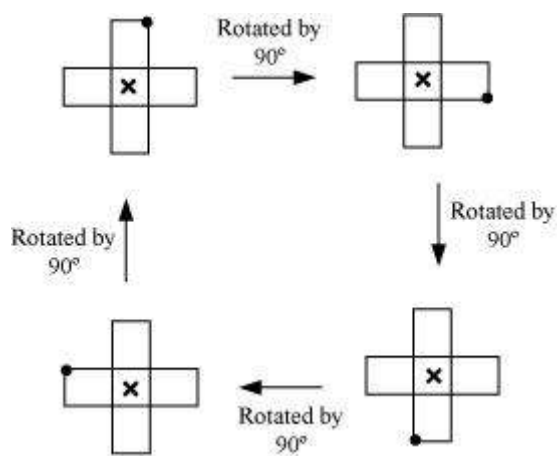
(c) The given figure has its rotational symmetry as 3.



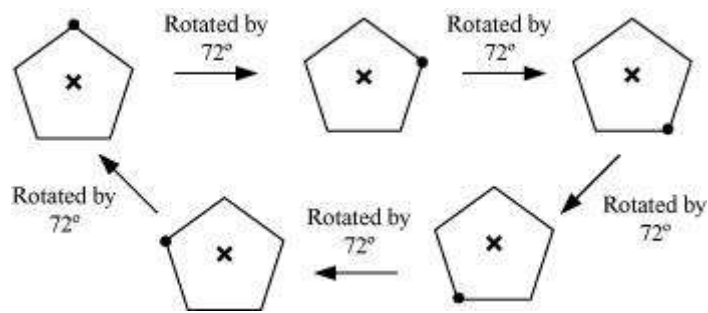
(d) The given figure has its rotational symmetry as 4.



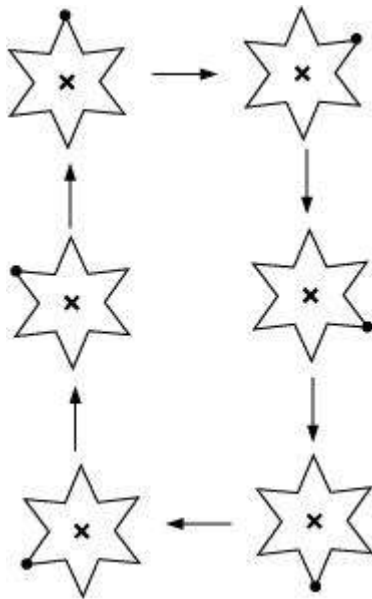
(e) The given figure has its rotational symmetry as 4.



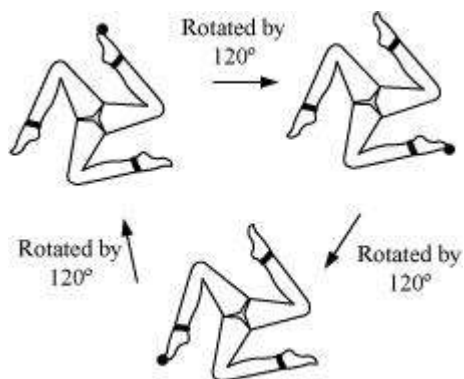
(f) The given figure has its rotational symmetry as 5.



(g) The given figure has its rotational symmetry as 6.



(h) The given figure has its rotational symmetry as 3.



Exercise 14.3

Question 1:

Name any two figures that have both line symmetry and rotational symmetry.

Answer:

Equilateral triangle and regular hexagon have both line of symmetry and rotational symmetry.

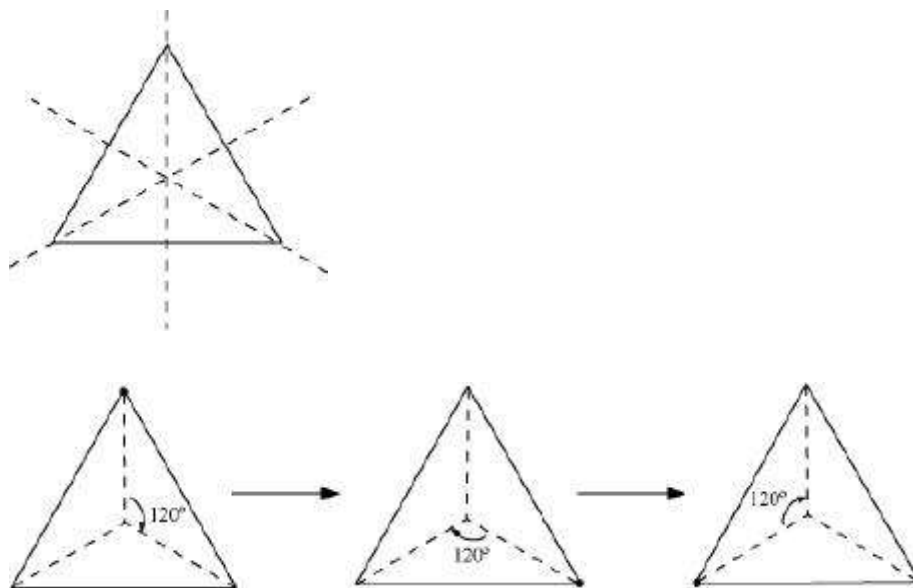
Question 2:

Draw, wherever possible, a rough sketch of

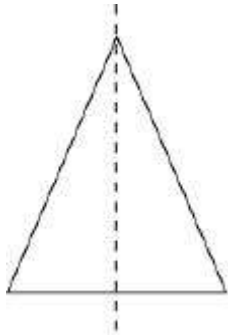
- (i) a triangle with both line and rotational symmetries of order more than 1.**
- (ii) a triangle with only line symmetry and no rotational symmetry of order more than 1.**
- (iii) a quadrilateral with a rotational symmetry of order more than 1 but not a line symmetry.**
- (iv) a quadrilateral with line symmetry but not a rotational symmetry of order more than 1.**

Answer:

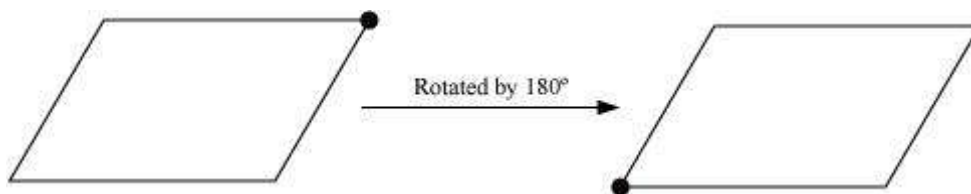
- (i) Equilateral triangle has 3 lines of symmetry and rotational symmetry of order 3.**



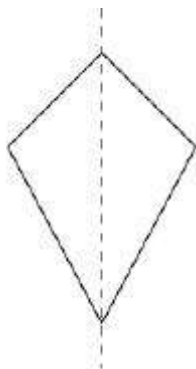
(ii) Isosceles triangle has only 1 line of symmetry and no rotational symmetry of order more than 1.



(iii) A parallelogram is a quadrilateral which has no line of symmetry but a rotational symmetry of order 2.



(iv) A kite is a quadrilateral which has only 1 line of symmetry and no rotational symmetry of order more than 1.



Question 3:

If a figure has two or more lines of symmetry, should it have rotational symmetry of order more than 1?

Answer:

Yes. If a figure has two or more lines of symmetry, then it will definitely have its rotational symmetry of order more than 1.

Question 4:

Fill in the blanks:

Shape	Centre of Rotation	Order of Rotation	Angle of Rotation
Square	-	-	-
Rectangle	-	-	-
Rhombus	-	-	-
Equilateral Triangle	-	-	-
Regular Hexagon	-	-	-
Circle	-	-	-
Semi-circle	-	-	-

Answer:

The given table can be completed as follows.

Shape	Centre of Rotation	Order of Rotation	Angle of Rotation
Square	Intersection point of diagonals	4	90°
Rectangle	Intersection point of diagonals	2	180°
Rhombus	Intersection point of diagonals	2	180°
Equilateral Triangle	Intersection point of medians	3	120°
Regular Hexagon	Intersection point of diagonals	6	60°
Circle	Centre	Infinite	Any angle
Semi-circle	Centre	1	360°

Question 5:

Name the quadrilaterals which have both line and rotational symmetry of order more than 1.

Answer:

Square, rectangle, and rhombus are the quadrilaterals which have both line and rotational symmetry of order more than 1. A square has 4 lines of symmetry and rotational symmetry of order 4. A rectangle has 2 lines of symmetry and rotational symmetry of order 2. A rhombus has 2 lines of symmetry and rotational symmetry of order 2.

Question 6:

After rotating by 60° about a centre, a figure looks exactly the same as its original position. At what other angles will this happen for the figure?

Answer:

It can be observed that if a figure looks symmetrical on rotating by 60° , then it will also look symmetrical on rotating by 120° , 180° , 240° , 300° , and 360° i.e., further multiples of 60° .

Question 7:

Can we have a rotational symmetry of order more than 1 whose angle of rotation is

(i) 45° ?

(ii) 17° ?

Answer:

It can be observed that if the angle of rotation of a figure is a factor of 360° , then it will have a rotational symmetry of order more than 1.

It can be checked that 45° is a factor of 360° but 17° is not. Therefore, the figure having its angle of rotation as 45° will have its rotational symmetry of order more

than 1. However, the figure having its angle of rotation as 17° will not be having its rotational symmetry of order more than 1.

اس شعر کا مطلب کیا ہے؟

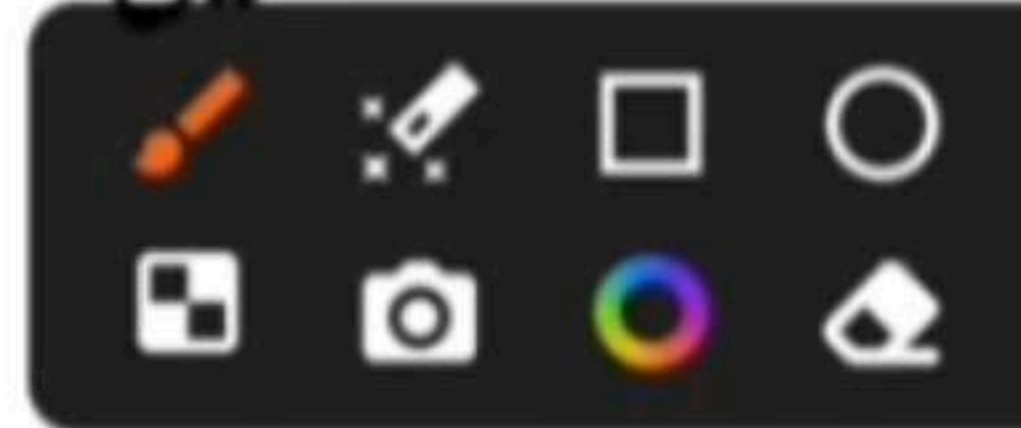
شاعر اس شعر میں فرماتے ہیں کہ ہمارے وطن کے پہاڑ
اور درخت خوبصورت اور دلکش ہیں اور یہ وطن کی
خوبصورتی کو بڑھاتے ہیں۔

سوال: وطن کو شاعر نے جنت کا ٹکڑا کیوں کہا ہے؟

ج: شاعر نے وطن کو جنت کا ٹکڑا اس لیے کہا ہے کیونکہ

یہ رنگ برنگے پھولوں، سرسبز جنگل، پیڑ پودوں اور

کہیں قسم کے جانوروں سے بھرا ہوا ہے۔



سوال: ہمیں اپنے وطن کی خوبصورتی کو قائم رکھنے
کے لیے کیا کرنا چاہیے؟

ج: ہمیں اپنے وطن کی خوبصورتی کو قائم رکھنے کے لئے

ارد گرد کے ماحول کو صاف رکھنا چاہیے اور سرسبز

جنگلوں، پیرپودوں، درختوں اور جانوروں کی حفاظت



سوال: دریاؤں جنگلوں پھولوں پھلوں اور جانوروں
کی بقا کے لئے ہمیں کیا کرنا چاہیے؟

ج: دریاؤں، جنگلوں، پھولوں، پھلوں اور جانوروں کی بقا
کے لیے ہمیں ماحول کے توازن کو برقرار رکھنے کی ہر
ممکن کوشش کرنی چاہئے اور ان چیزوں کی حفاظت کو

لازمی بنانا چاہیے۔



جادو بیاں
سحر اٹکین
لطف اندوز
قبلہ نما

سوال: شاعر نے وطن سے اپنی محبت کا اظہار کس طرح کیا ہے؟

ج: شاعر نے وطن سے اپنی محبت کا اظہار اس کی ہر چیز کو دلکش اور خوبصورت کہہ کر کیا ہے۔

عنوان : میونے وطن مبارک
سبق نمبر : 10
گناب : کاشتر
آئشلی : جوابات

(ج 1) پشلی کلین تل چھ فریش سمنل یعنی سبزارق فریش۔

(ج 2) لولن مئز چھ وطنک لول لہ بوڈ لول۔

(ج 3) شاعر سٹرن کتھن چھ صحتگی پوش یران۔

(سوال نمبر 3) شیمس شمس مئز چھن یہ خیال بوومنت۔

(ج 4) دو یمن، ترکیس، ژورمس پے پونترمس شمس مئز۔

(6) ناوت جمع

لنڈ لنجی

زئز زئجی

کئز کئجی

سرنڈ سرنجی

کھنڈ کھنجی

دئز دئجی

write a short note on the following topics
in your own words.

- 1) How to make a lipton cup of tea.
- 2) write a note on Taj Mahal.
- 3) why is Sunday considered as fun day.
- 4) write a note on your principal ma'am.
- 5) Value of time.

Battle of Badr and uhud

Class 7th

Answer key

Ans.1.Trade was important for the makkans because the economy of makkans depended on trade.

Ans.2. The prophet Muhammed saw along with 313 companions participated in the battle of Badr.

Ans.3.70 unbelievers were killed during the battle of Badr.

Ans.4.A stone thrown by an unbeliever hit hardly in the face of prophet saw .the blood ran down his face ,in this way prophet saw got injured.

Ans.5.Most of the archers left their post believing that the battle had been won .this was a big mistake.Seeing that the archers had left their position, Khalid Ibni al.Walid attacked muslims with his horsemen from behind and martyred the remaining archers. This changed the battle and a scene of great confusion followed .Meanwhile, it was rumoured that prophet saw had been martyred ,in this way they muslims lose the battle of uhud.

CLASS 7th ASSIGNMENT FOR SUMMER BREAK

shahid majeed

june 2025

1 GOOGLE APPS

Students are advised to do thorough reading of the chapter and write the solutions on their respective notebooks. practical work related to chapter shall be done in school only after the resumption of regular classwork.

SHORT ANSWER TYPE QUESTIONS

1) Define Google Drive.

ans) Google Drive is a cloud storage service which allows you to save files in remote server.

2) What do you mean by Google Slides?

ans) Google Slides is an online version of Microsoft PowerPoint which allows you to make presentations online.

3) Explain Google Maps.

ans) Google Maps is a digital navigation program that provides detailed information about the geographical regions of any particular area.

4) What do you mean by Gmail?

ans) Gmail is a free mailing app accessible over the Internet.

5) Define Google Docs.

ans) Google Docs is a free online word processing program similar to Microsoft Word.

LONG ANSWER TYPE QUESTIONS

1) Write the steps to open Google Docs.

ans)

(i) Click on Google apps button

(ii) Click on Docs icon from drop down menu.

(iii) Click on blank page template. A new blank document opens.

2) Mention some important features of youtube.

ans) Following are the features of youtube:

(i) Users can search for any particular keyword.

(ii) Users can create own channel and upload videos on youtube.

(iii) Users can create playlists to organise videos to watch them later.

3) What is youtube? Write your views on YouTube?

ans) YouTube is a popular video sharing platform where people can watch, upload, and share videos on various topics.

I think YouTube is a great platform for learning and entertainment. It offers content for all age groups and interests. I personally use it to watch educational videos and tutorials. It helps me understand difficult topics easily.

4) Define Google Sheets. How can you share and protect and share data in Google sheet?

ans) Google Sheets is a web based spreadsheet application that allows users to create, edit, and collaborate on spreadsheets online.

To protect data, you can lock specific cells or sheets by setting permissions so only selected users can edit them. To share data, click the "Share" button, then enter email addresses of people you want to share with and choose whether they can view, comment, or edit.

ATTEMPT PERIODIC ASSESSMENT 3 BY YOURSELF

2 MORE ON HTML5

Students are advised to do thorough reading of the chapter and write the solutions on their respective notebooks. practical work related to chapter shall be done in school only after the resumption of regular classwork.

SHORT ANSWER TYPE QUESTIONS

1) What's the use of `<hr>` tag?

ans) `<hr>` tag is used when you want to divide your web page into different sections.

2) Which property is used for indentation in HTML5?

ans) Text indent

3) Which tag will be frequently used to write algebraic formulas?

ans) `<sub>`, `<sup>`

LONG ANSWER TYPE QUESTIONS

1) Explain the use of horizontal ruler tag and it's various attributes.

ans) The `<hr>` tag in HTML is used to insert a horizontal line, known as a horizontal ruler, to separate content or sections on a web page.

Attributes like width, size, color, and align were used in older HTML versions but are now deprecated. Instead, CSS properties such as width, height, border, and background-color are preferred.

2) Explain the uses of the font property in detail.

ans) Key Uses of the font Property are :

(i) Sets Font Style: You can apply styles like normal, italic, or oblique to change the slant of text.

Example: font-style: italic;

(ii) Sets Font Weight: it Controls the thickness of the font, such as normal, bold, or numeric values,

Example: font-weight: bold;

(iii) Sets Font Size: Defines the size of the text using units like px, em. Example: font-size: 16px;

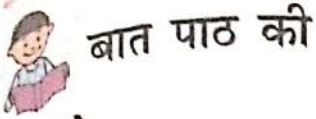
(iv) Sets Line Height: Determines the spacing between lines. Example: line-height: 1.5;

Distinguish between: a) `<sub>` AND `<sup>` tags b) text-align and text-indent

ans) (a) The `<sub>` tag is used to display text as subscript, which means the text appears slightly below the normal line. where as the `<sup>` tag displays text as superscript, which means the text appears slightly above the normal line.

(b) The text-align property in CSS is used to align the entire block of text within its container. It can align text to the left, right, center, or justify it across the page. In contrast, text-indent is used to indent only the first line of a paragraph.

अभ्यास Exercise



बात पाठ की

मुख से

इन प्रश्नों के उत्तर दीजिए।
Answer these questions.

- दुबई कहाँ पर स्थित है?
- दुबई के आसपास कौन-कौन सी जगह हैं?
- सितंबर-अक्टूबर में दुबई का तापमान कितना होता है?
- दुनिया की सबसे ऊँची इमारत कौन-सी है?

कलम से

1. इन प्रश्नों के उत्तर लिखिए।

Write answers to these questions.

- दुबई की कौन-सी चीजें सबको आकर्षित करती हैं?

बड़ी-बड़ी इमारतें (Badi-Badi Imaratay)

- दुबई को धरती का जन्नत क्यों कहा जाता है?

दुबई की मेट्रो स्वचालित है इसलिए इसे जन्नत कहा है।
Dubai ki metro swachalit hai isliye use jannat kaha hai.

- दुबई में ट्रैफिक की क्या व्यवस्था है?

वहाँ ट्रैफिक को लेकर काफी सख्ती है, कोई भी नियम नहीं तोड़ता।
Vaha traffic ko lekar kafi sakhti hai, koi bhi niyam nahi todta.

- दुबई में लोग जमीन पर क्यों नहीं थूकते?

वहाँ वे सजा से डरते हैं।
Vaha ki jamiin pe kyon nahi thukate? Vaha kyonki wo sja se darte hai.

- दुबई मेट्रो के विषय में अपने शब्दों में लिखिए।

वहाँ की मेट्रो स्वचालित होती है।
Vaha ki metro swachalit hoti hai.

Vaha ki metro swachalit hoti hai.

Put '✓' mark against correct answer.

i. गहरा नीला समुद्र

iii. लज्जीज पकवान

(ख) दुबई में मेट्रो की शुरुआत हुई-

i. दिसंबर 2009

iii, सितंबर 2009

(ग) दुबई संग्रहालय किसके नाम से प्रसिद्ध है?

i. बुर्ज खलीफा

iii. जन्मत

ii. भव्य इमारतें

iv. उपर्युक्त सभी

ii) सितंबर 2011

iv. इनमें से कोई नहीं

ii. अलमस्त

iv. अल फ़हिदी

3. उचित शब्द चुनकर रिक्त स्थान भरिए।

Choose the correct word and fill in the blanks.

संग्रहालय, इमारतों, आबादी, ट्रेफिक, जन्मत

(क) आसमान छूती इमारती का यह शहर हर पल हैरान करता है।

(ख) दुबई में शुक्र को लेकर काफी सख्ती है।


(ग) रेगिस्तान के शहर को धरती का जन्म कहा जा सकता है।

(घ) दुबई महल को देखे बिना दुबई की यात्रा पूरी नहीं हो सकती।

(ड) यूएई की सभी अमीरातों में से दुबई की आबादी सबसे अधिक है।



पाठ से आगे

 आप अपने विद्यालय में नियम व्यवस्था बनाए रखने के लिए क्या-क्या करते हैं?



बात भाषा की

1. बहुवचन लिखिए।

Write plurals.

(क) इमारत - इमारतें

(ग) चीज़ - चीज़

(ड) सड़क - भड़के

(ख) कार -

(घ) टीला - दीदी

(च) कमरा - कमरे

Grammar S

- Plural
- Antonyms
- Synonyms
- Spellings

2. विलोम शब्द लिखिए।
Write antonyms.

(क) एक × अनेक
(ग) गहरा × उथला
(ङ) ऊँचा × नीचा

(ख) ऊपर × नीचे
(घ) भीतर × बाहर
(च) आधुनिक × प्राचीन

3. दिए गए शब्दों के पर्यायवाची लिखिए।
Write synonyms of the given words.

(क) तट - किनारा, किनारा
(ग) जमीन - धरती, भूमि

(ख) पेड़ - वृक्ष, पौधा
(घ) प्रसिद्ध - जानी-मशहूर, मशहूर

4. निम्न शब्दों की वर्तनी शुद्ध कीजिए।
Write the correct spellings.

(क) पर्यटक - पर्यटक
(ग) दुनिया - दुनिया

(ख) संस्कृति - संस्कृति
(घ) सहर - शहर

एचनात्मक अभिव्यक्ति Creative Expression



बात मन की

Creative Writing

- विदेश में रह रहे अपने मित्र को दुबई की भव्यता के विषय में बताते हुए पत्र लिखिए।
- 'मेरी यात्रा' विषय पर 40-50 शब्दों में अनुच्छेद लिखिए।



हँसते-गाते

Activities

- Inter-Disciplinary
- Project Work & Digital Literacy

1. अंतर्विषयक गतिविधियाँ

भूगोल	मानचित्र पर संयुक्त अरब अमीरात (यूएई) की सात अमीरातों को दर्शाइए।
हिंदी	दुबई टूरिज्म को बढ़ावा देने के लिए एक नारा लिखिए या रैप गाना बनाइए।
इतिहास	दुबई की स्थापना कब हुई और किसने की?

2. परियोजना-कार्य

विषय : दुबई एक्सपो

- (क) दुबई एक्सपो का आयोजन कब और कहाँ किया गया? इसका समापन कब हुआ?
- (ख) इसका मुख्य उद्देश्य क्या है?
- (ग) कितने देशों ने हिस्सा लिया?
- (घ) भारतीय पवेलियन की क्या-क्या विशेषताएँ रहीं?

उपरोक्त बिंदुओं पर आधारित एक सचित्र परियोजना तैयार कीजिए।

दुबई: वैभव का प्रतिमान



59



The Bear Story

Answer the following questions.

Question 1. Where did the lady find the bear cub? How did she bring it up?

Answer: The lady found the bear cub in the forest, half dead of hunger. It was very small. The lady had to bring it up on a bottle with the help of the cook.

Question 2. The bear grew up, but "he was a most amiable bear". Give three examples to prove this.

Answer: The three examples that prove that he indeed was a most amiable bear are:

- He used to watch the cattle grazing in a friendly way.
- The three dogs used to play with him, pull his ears and tease him.
- Children used to ride his back.

Question 3. What did the bear eat? There were two things he was not allowed to do. What were they?

Answer: The bear ate the food the same as the dogs porridge, bread, cabbage, potato, and turnip. He liked fruits.

He was not allowed to do the following:

- Pluck apples from the apple tree.
- Harm the beehives on the tree.

Question 4. When was the bear tied up with a chain? Why?

Answer. The bear was tied up on Sundays because his mistress used to go for a visit to her sister.

Question 5. What happened one Sunday when the lady was going to her sister's house? What did the lady do? What was the bear's reaction?

Answer: One Sunday, when the lady was going to her sister's house, she heard the sound of cracking branches behind her. She saw the bear. She was angry at him for having left the room. She hit him with her parasol. The bear turned around and began to walk back.

Question 6. Why was the bear looking sorry for himself in the evening? Why did the cook get angry with her mistress?

Answer: The bear looked sad in the evening as he didn't like being locked up and wanted to join his mistress on the walk.

The cook got angry because the mistress scolded the bear, but the cook insisted he had stayed quietly in the room all day.

Discuss the following topics in groups.

Question 1. Most people keep dogs and cats as pets. Can you think of some unusual pets that people keep?

Answer: Most people keep dogs and cats as pets. Some unusual pets that people keep are:

snakes such as python

– bears

– tigers

– wolves

Question 2. The second bear did not attack the lady because he was afraid of her. Do you agree?

Answer: Yes, I agree that the second bear did not attack the lady because he was afraid of her. Usually,

people get scared when they see a bear around. But the bear saw that the lady was confident and was even

scolding him. This frightened the bear.

The Invention of Vita-Won

Answer the following questions:

Question 1. Choose the right answer.

(1) Mr Willy Wonka is

(a) a cook (b) an inventor (c) a manager.

Answer: (b) an inventor

(ii) Wonka-Vite makes people

(a) older (b) younger.

Answer: younger

(iii) Mr Wonka wants to invent a new thing which will make people

(a) younger (b) older.

Answer: (b) older

Question 2. Can anyone's age be a minus number? What does "minus 87" mean?

Answer: No, someone's age cannot be a minus number. It is calculated from the day we are born. Minus 87 means that the person will have to wait for 87 years to take birth.

Question 3: Mr Wonka begins by asking himself two questions. What are they?

(i) What is. ?

(ii) What lives. ?

Answer: Mr Wonka begins by asking himself two questions. They are:

(i) What is the oldest living thing in the world?

(ii) What lives longer than anything else?

Working with the text

Answer the following questions.

Question 1. (i) What trees does Mr Wonka mention? Which tree does he say lives the longest?

(ii) How long does this tree live? Where can you find it?

Answer: (1) Mr Wonka mentions the following trees:

- Douglas fir
- Oak
- Cedar
- Bristlecone pine

He says that the Bristlecone pine lives the longest.

(ii) This tree has lived for over 4000 years. It can be found upon the slopes of Wheeler Peak in Nevada, U.S.A.

Question 2. How many of the oldest living things can you remember from Mr Wonka's list? (Don't look back at the story!) Do you think all these things really exist, or are some of them purely imaginary?

Answer: Here are the oldest living things that are enlisted by Mr Wonka:

- A 4000-year-old bristlecone pine
- A 168-year-old Russian farmer
- A 200-year-old tortoise
- A 51-year-old horse
- A 36-year-old cat
- A 207-year-old giant rat
- A 97-year-old grimalkin
- A 700-year-old cattalo
- A 36-year-old-flea

I think most of them exist, while some might be purely imaginary.

Question 3. Why does Mr Wonka collect items from the oldest things? Do you think this is the right way to begin his invention?

Answer: Mr Wonka collects items from the oldest things because he had to invent an item that can make people older.

I think researching the oldest things is still a good idea as it can give him an insight into what might be the reason behind their long life. But, collecting little things from such species is not a great idea to begin his invention.

Question 4. What happens to the volunteer who swallows four drops of the new invention? What is the name of the invention?

Answer: The volunteer began to wrinkle and shrivel up all over. His hair started to drop off and his teeth started to fall out. He suddenly became a seventy-five year-old man!

The name of the invention was Vita-Wonk.

Class 7 science assignment(summer break)

shahid majeed

june 2025

1 Reproduction in plants

Answers:

- (a) Production of new individuals from the vegetative part of parent is called vegetative propagation .
- (b) A flower may have either male or female reproductive parts. Such a flower is called unisexual .
- (c) The transfer of pollen grains from the anther to the stigma of the same or of another flower of the same kind is known as pollination.
- (d) The fusion of male and female gametes is termed as fertilisation .
- (e) Seed dispersal takes place by means of wind , water and animals .

Question 2: Describe the different methods of asexual reproduction. Give examples.

Answer: The various modes of asexual reproduction in plants are as follows:

- (i) Vegetative propagation: It is the ability of a plant to produce new plants from roots, stems, leaves, and buds. Vegetative propagation is divided into two types.

Natural vegetative propagation: Potato plant sprouting from an eye is a common example.

Artificial vegetative propagation: The formation of a complete plant from a stem cutting of rose is a common example of this method.

- (ii) Budding: It involves the formation of a new individual from a bulb-like projection called a bud. It is commonly observed in yeast.

- (iii) Fragmentation: It is a form of asexual reproduction where a new organism is formed from the fragments of the parent body.

Question 3: Explain what you understand by sexual reproduction.

Answer: Sexual reproduction is a process which involves production of seeds. It requires two parents. Most plants reproduce sexually with the help of flowers. The main function of a flower is to reproduce and therefore develop new seeds that can grow into new plants.

Question 4: State the main difference between asexual and sexual reproduction.

Answer: Differences between sexual and asexual reproduction:

Asexual reproduction	Sexual reproduction
It requires only one parent.	It requires two parents.
In asexual reproduction, newly developed plants are identical to the parent and to each other.	In sexual reproduction, newly developed plants are not identical to parents.
Special reproductive parts are not required for asexual reproduction.	Flower is the reproductive part of a plant which contains the sexual organs of a plant. These are important for sexual reproduction.
Examples are yeast, rose, jasmine, potato, etc.	Examples are flowering plants such as Hibiscus, corn, papaya, etc.

Question 6: Explain the difference between self-pollination and cross-pollination.

Answer: Differences between self-pollination and cross-pollination:

Self-pollination	Cross-pollination
It involves the transfer of pollen from the stamen to the pistil of the same flower.	It involves the transfer of pollen from the stamen of one flower to the pistil of another flower of the same plant or that of a different plant of the same kind.
It occurs only in bisexual flowers.	It occurs in both unisexual and bisexual flowers.

Question 7: How does the process of fertilisation take place in flowers?

Answer: When pollen lands on stigma, it germinates and gives rise to a pollen tube that passes through the style and reaches the ovary of a pistil. When the pollen tube reaches an ovule, it releases the male gametes. A male gamete fuses with a female gamete in the ovule. This process is known as fertilisation. The cell which is formed after the fusion of a male and a female gamete is known as zygote. This zygote divides several times in order to form the embryo present inside the seed.

Question 8: Describe the various ways by which seeds are dispersed.

Answer: Seed dispersal occurs by the following agencies.

(a) Dispersal by animals birds and animals can eat the fruits and excrete the seeds away from the parent plant. Some seeds have barbs or other structures that get attached to the animal's body and are carried to new sites.

(b) Dispersal by wind Seeds that get dispersed by wind are usually smaller in size or they have wings or hair-like structures. For example, winged seeds of drumsticks, hairy fruit of sunflower, etc. are dispersed by wind.

(c) Dispersal by water Many aquatic plants has seeds that can float and are carried away by water. For example, coconuts can float and are dispersed by water.

Question 5: Sketch the reproductive parts of a flower.

Answer: fig 12.9 a,b

2 Forests: Our Lifeline

Q.1. Explain how animals dwelling in the forest help it grow and regenerate.

Ans. Animals help in growing and regenerating forests in many ways. Animals work as the cleaning agents in the forest. Microorganisms work on dead bodies of plants and animals and degenerate them. Animals also help in pollination which helps in growing a number of plants. Herbivores help the carnivores to grow as they serve as food for them. Thus flora and fauna mutually grow in the forest.

Q.2. Explain how forests prevent floods. Ans. Forests can absorb a lot of water. The roots of the trees absorb the water and prevent it from flowing away. Roots of trees also help in percolation of water into the soil. This helps in preventing floods.

Q.3. What are decomposers? Name any two of them. What do they do in the forest? Ans. Decomposers are the organisms which feed on the dead bodies of plants and animals. They clean the forests decaying dead bodies and replenishing the nutrients back to the forest soil, e.g. beetles and grubs.

Q.4. Explain the role of forest in maintaining the balance between oxygen and carbon dioxide in the atmosphere.

Ans. Plants release oxygen in the atmosphere during the process of photosynthesis. This oxygen is inhaled by the animals for respiration. During respiration, they release carbon-dioxide which is absorbed by plants. In this way the oxygen and carbon dioxide cycle goes on. Since forests contain a large number of plants, they help much in this cycle and maintain balance in nature.

Q.5. Explain why there is no waste in a forest.

Ans. There is no waste in the forest because decomposers convert all the dead bodies of the plants and animals into the humus which gets added to the soil. Thus, no waste remains.

Q.6. List five products we get from forests.

Ans. (i) We get medicines from forests. (ii) We get gum from forests. (iii) We get wood which is used for many purposes like making furniture, paper etc. (iv) We get food for animals from forests. (v) We get sealing wax from forests.

Q.7. Fill in the blank:

(a) The insects, butterflies, honeybees and birds help flowering plants in . (b) A forest is a purifier of and . (c) Herbs form the layer in the forest. (d) The decaying leaves and animal droppings in a forest enrich the .

Ans. (a) pollination (b) water, air (c) lowest (d) soil as humus.

Q.8. Why should we worry about the conditions and issues related to forests far from us?

Ans. We should be worried about deforestation as it would lead to floods, increase in earth's temperature, decreasing animals habitats and soil erosion. Damage to forests directly or indirectly affects human habitat and environment so it must be a matter of concern among us.

Q.9. Explain why there is a need of variety of animals and plants in a forest.

Ans. All plants and animals sustain the forest life and also $\text{CO}_2 - \text{O}_2$ cycle goes on due to animals and plants. Animals convert the dead and decaying matters into humus and increase the fertility of soil, thus enhancing plant growth. All food chains and food webs need variety of plants and animals.

Q.11. Which of the following is not a forest product? (i) Gum (ii) Plywood (iii) Sealing wax (iv) Kerosene

Ans. (iv) Kerosene

Q.12. Which of the following statements is not correct? (i) Forests protect the soil from erosion. (ii) Plants and animals in a forest are not dependent on one another. (iii) Forests influence the climate and water cycle. (iv) Soil helps forests to grow and regenerate.

Ans. (ii) Plants and animals in a forest are not dependent on one another.

Q.13. Micro-organisms act upon the dead plants to produce (i) sand (ii) mushrooms (iii) humus (iv) wood

Ans. (i) Humus

Class 7th

QURAN

Recite and memorize Surah-Tul-Madniyah