

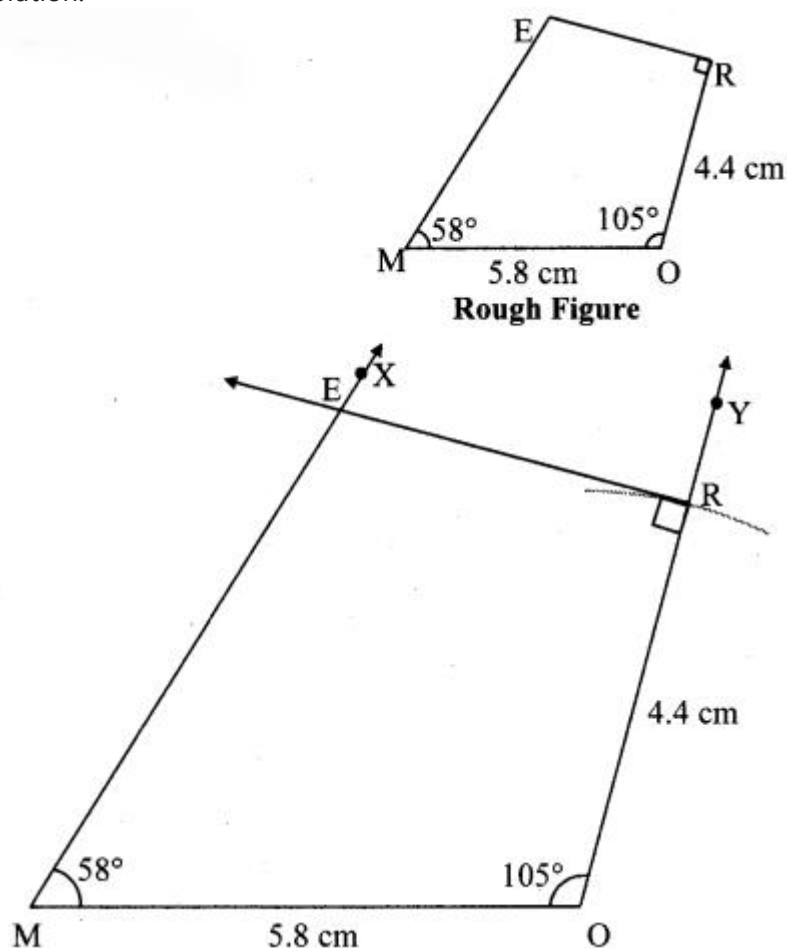
## Practice Set 8.1 8th Std Maths Answers Chapter 8 Quadrilateral: Constructions and Types

Construct the following quadrilaterals of given measures.

Question 1.

In  $\triangle MORE$ ,  $l(MO) = 5.8$  cm,  $l(OR) = 4.4$  cm,  $m\angle M = 58^\circ$ ,  $m\angle O = 105^\circ$ ,  $m\angle R = 90^\circ$ .

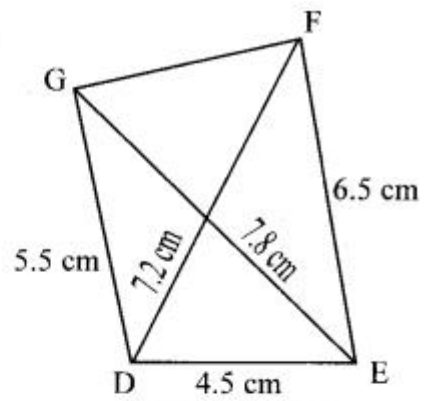
Solution:



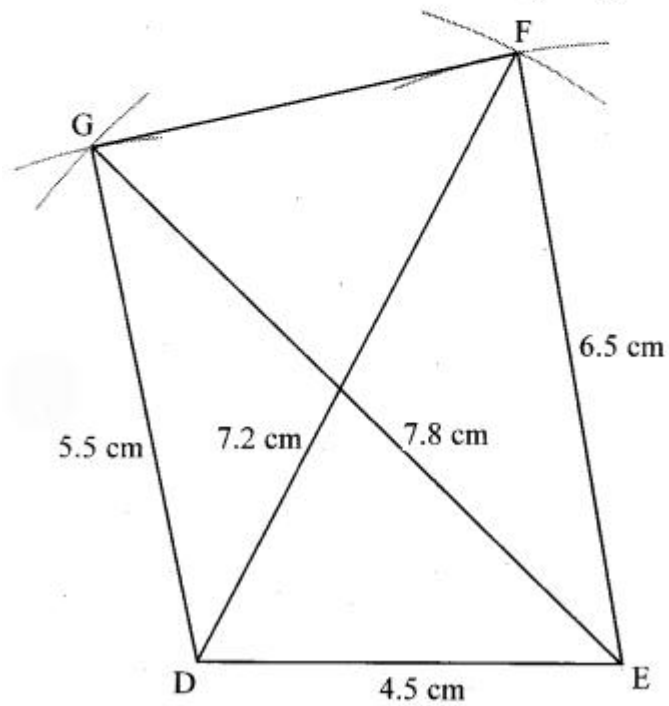
Question 2.

Construct  $\triangle DEFG$  such that  $l(DE) = 4.5$  cm,  $l(EF) = 6.5$  cm,  $l(DG) = 5.5$  cm,  $l(DF) = 7.2$  cm,  $l(EG) = 7.8$  cm.

Solution:



**Rough Figure**



Question 3.

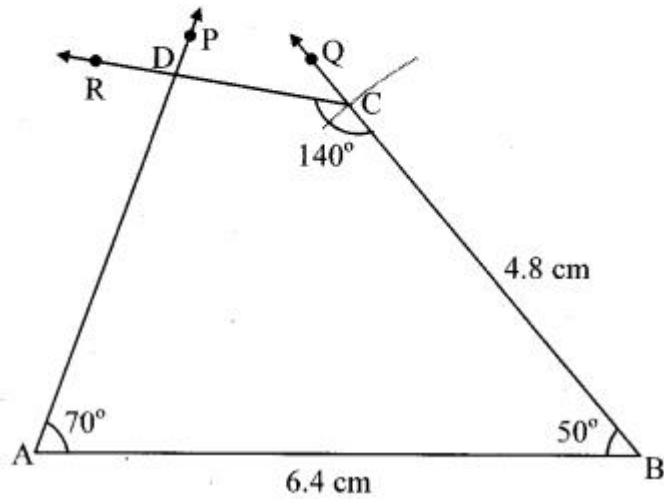
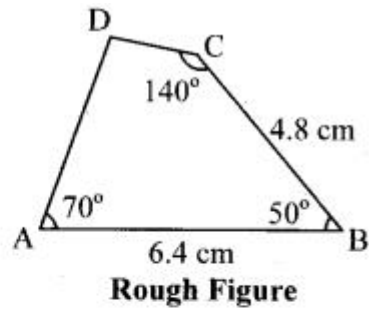
In  $\triangle ABC$ ,  $l(AB) = 6.4$  cm,  $l(BC) = 4.8$  cm,  $m\angle A = 70^\circ$ ,  $m\angle B = 50^\circ$ ,  $m\angle C = 140^\circ$ .

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Solution:



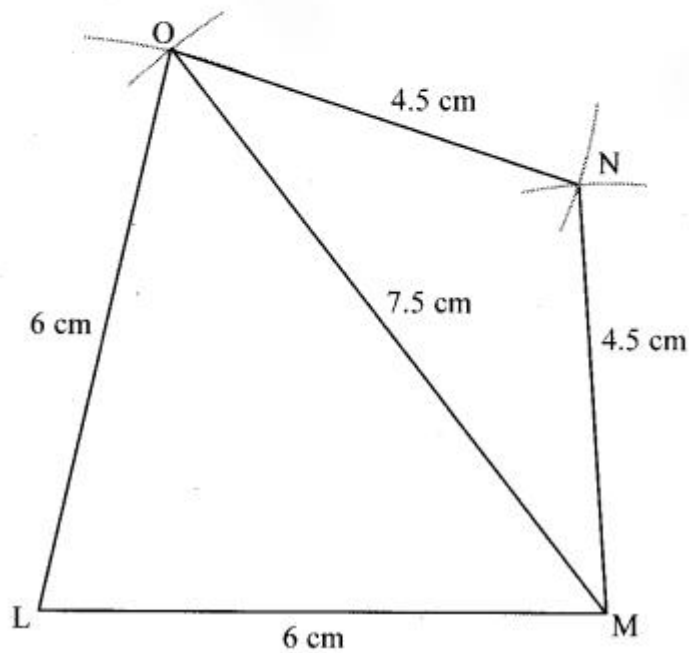
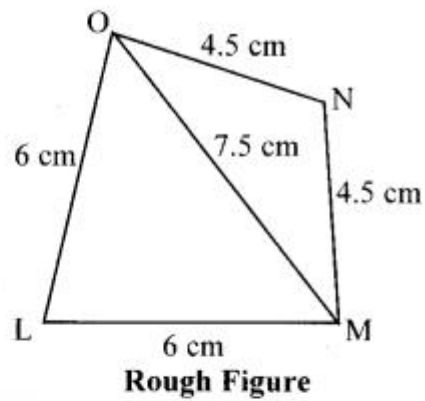
Question 4.

Construct  $\square LMNO$  such that

$l(LM) = l(LO) = 6$  cm,

$l(ON) = l(NM) = 4.5$  cm,  $l(OM) = 7.5$  cm.

Solution:



**Maharashtra Board Class 8 Maths Chapter 8 Quadrilateral: Constructions and Types**  
**Practice Set 8.1 Intext Questions and Activities**

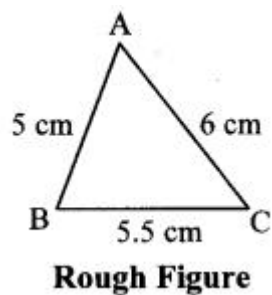
Question 1.

Construction of a triangle:

Construct the triangles with given measures. (Textbook pg. no. 41)

i.  $\triangle ABC$ :  $l(AB) = 5\text{ cm}$ ,  $l(BC) = 5.5$ ,  $l(AC) = 6\text{ cm}$ .

Solution:



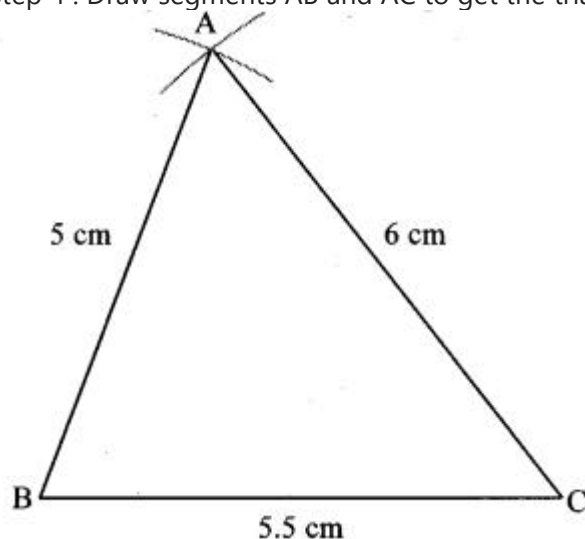
Steps of construction:

Step 1 : As shown in the rough figure, draw seg BC of length 5.5 cm as the base.

Step 2 : By taking a distance of 5 cm on the compass and placing the metal tip of the compass on point B, draw an arc on one side of BC.

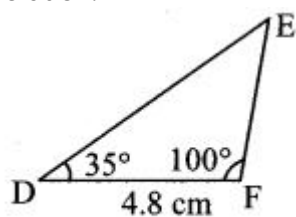
Step 3 : By taking a distance 6 cm on the compass and placing the metal tip of the compass on point C and draw an arc ' such that it intersects the previous arc. Name the point as A.

Step 4 : Draw segments AB and AC to get the triangle.  $\triangle ABC$  is the required triangle.



ii.  $\triangle DEF$ :  $m\angle D = 35^\circ$ ,  $m\angle F = 100^\circ$ ,  $l(DF) = 4.8$  cm.

Solution:



**Rough Figure**

Steps of construction:

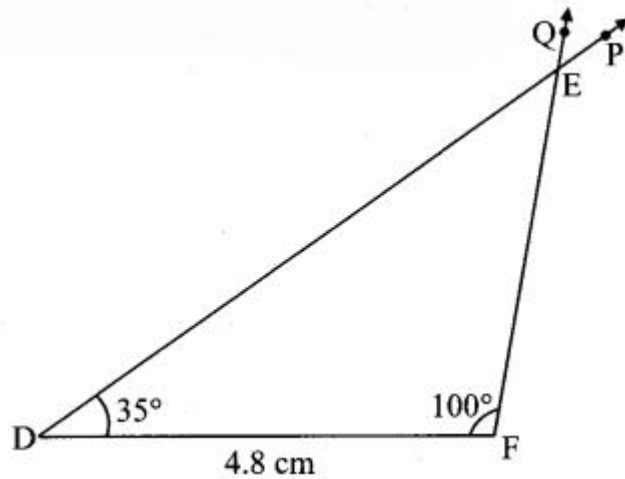
Step 1 : As shown in the rough figure, draw seg DF of length 4.8 cm as the base.

Step 2 : Placing the centre of the protractor at point D, mark point P such that  $m\angle PDF = 35^\circ$ .

Step 3 : Placing the centre of the protractor at point F, mark point Q such that  $m\angle QFD = 100^\circ$ .

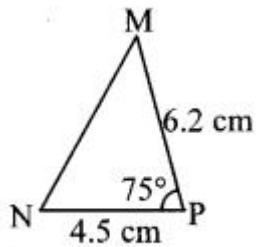
Step 4 : Draw ray DP and ray FQ. Name their point of intersection as E.

$\triangle DEF$  is required triangle.



iii.  $\triangle MNP$ :  $l(MP) = 6.2$  cm,  $l(NP) = 4.5$  cm,  $m\angle P = 75^\circ$ .

Solution:



### Rough Figure

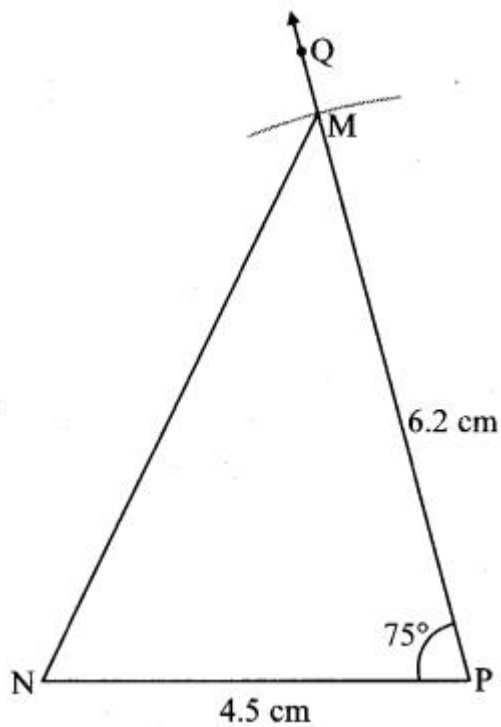
Steps of construction:

Step 1 : As shown in the rough figure, draw seg PN of length 4.5 cm as the base.

Step 2 : Placing the centre of the protractor at point P, mark point Q such that  $m\angle QPN = 75^\circ$ .

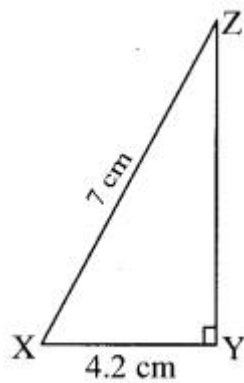
Step 3 : By taking a distance of 6.2 cm on the compass and placing the metal tip at point P, draw an arc on ray PQ. Name the point as M.

Step 4 : Draw seg MN to get the triangle.  $\triangle MNP$  is the required triangle.



iv.  $\triangle XYZ$ :  $m\angle Y = 90^\circ$ ,  $l(XY) = 4.2$  cm,  $l(XZ) = 7$  cm.

Solution:



**Rough Figure**

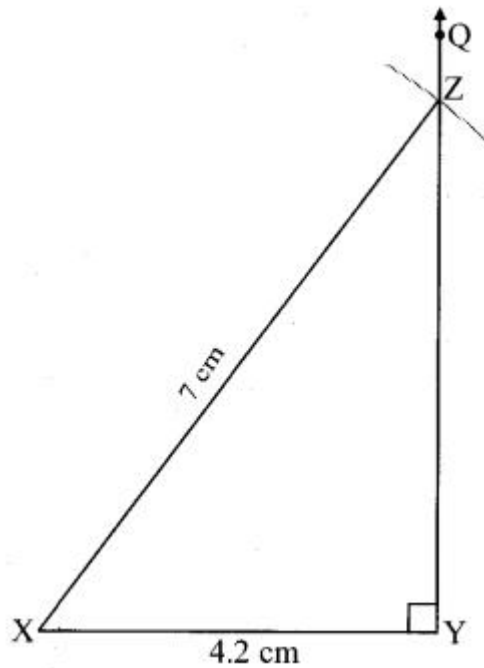
Steps of construction:

Step 1 : As shown in the rough figure, draw seg XY of 4.2 cm as the base.

Step 2 : Placing the centre of the protractor at point Y, mark point Q such that  $m\angle QYX = 90^\circ$ .

Step 3 : By taking a distance of 7 cm on the compass and placing the metal tip on point X, draw an arc on ray YQ. Name the point as Z.

Step 4 : Draw seg XZ to get the triangle.  $\triangle XYZ$  is the required triangle.



## Practice Set 8.2 8th Std Maths Answers Chapter 8 Quadrilateral: Constructions and Types

Question 1.

Draw a rectangle ABCD such that  $l(AB) = 6.0$  cm and  $l(BC) = 4.5$  cm.

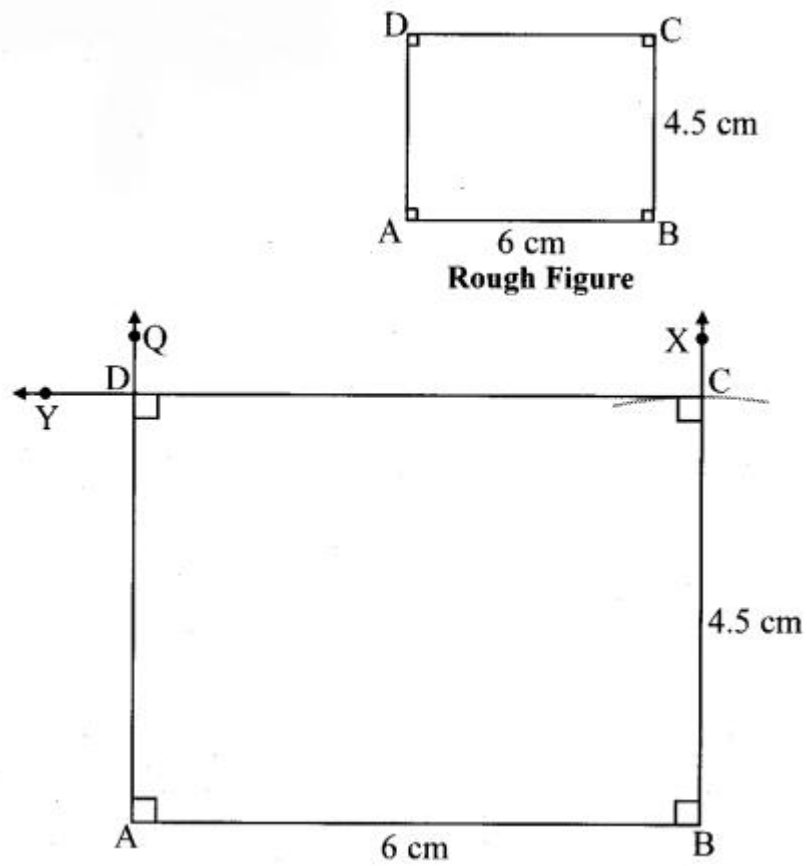


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Solution:

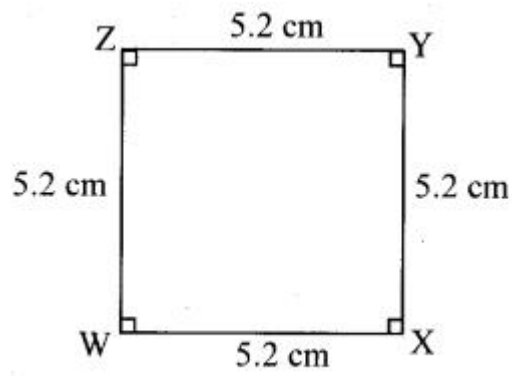


Question 2.

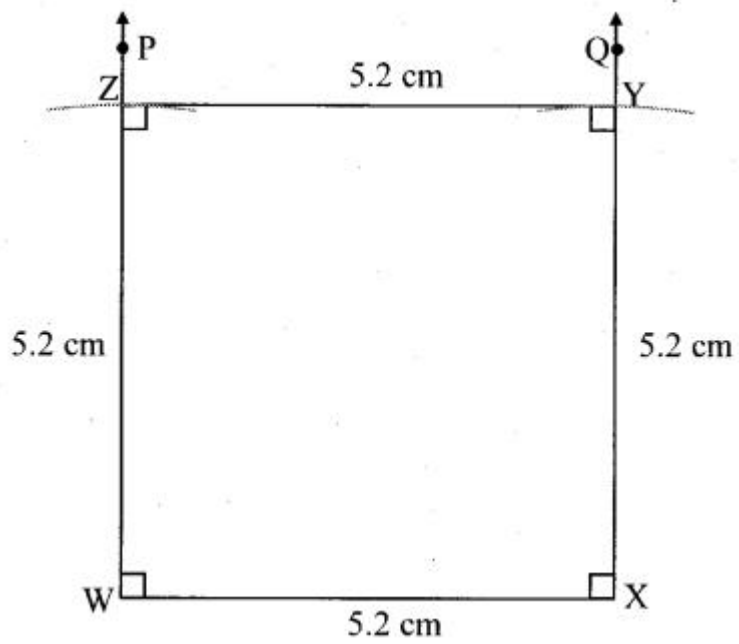
Draw a square WXYZ with side 5.2 cm.

Solution:

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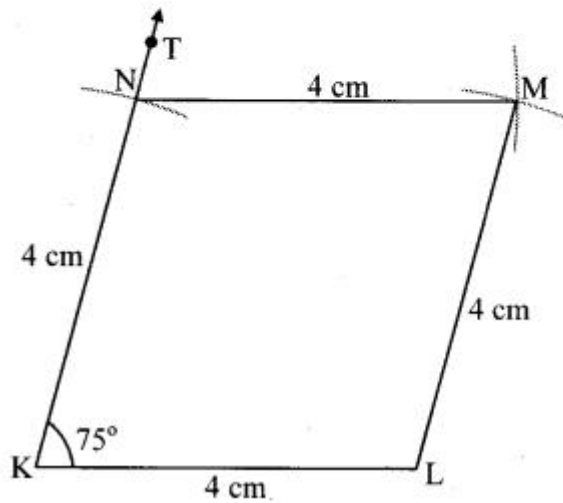
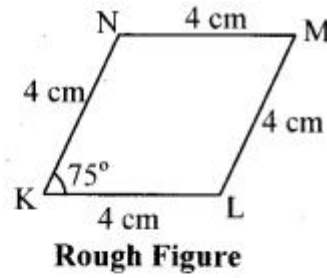
**Rough Figure**



Question 3.

Draw a rhombus KLMN such that its side is 4 cm and  $m\angle K = 75^\circ$ .

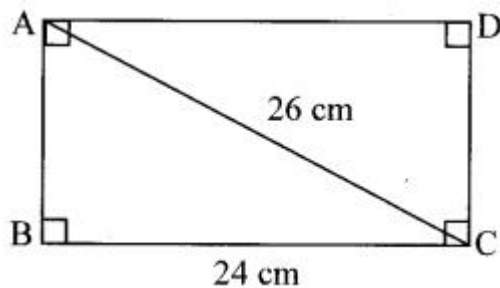
Solution:



Question 4.

If diagonal of a rectangle is 26 cm and one side is 24 cm, find the other side.

Solution:



Let  $\square ABCD$  be the rectangle.

$l(BC) = 24\text{cm}$ ,  $l(AC) = 26\text{cm}$

In  $\triangle ABC$ ,

$m\angle ABC = 90^\circ$  ...[Angle of a rectangle]

$$\therefore [l(AC)]^2 = [l(AB)]^2 + [l(BC)]^2$$

...[Pythagoras theorem]

$$\therefore (26)^2 = [l(AB)]^2 + (24)^2$$

$$\therefore (26)^2 - (24)^2 = [l(AB)]^2$$

$$\therefore (26 + 24)(26 - 24) = [l(AB)]^2$$

$$\therefore \because a^2 - b^2 = (a + b)(a - b)$$

$$\therefore 50 \times 2 = [l(AB)]^2$$

$$\therefore 100 = [l(AB)]^2$$

$$\text{i.e. } [l(AB)]^2 = 100$$

$$\therefore l(AB) = \sqrt{100}$$

...[Taking square root of both sides]

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$\therefore l(AB) = 10 \text{ cm}$

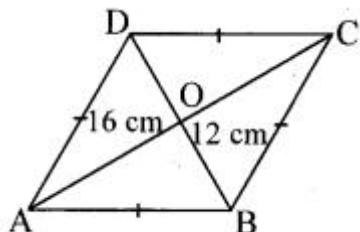
$\therefore$  The length of the other side is 10 cm.

Question 5.

Lengths of diagonals of a rhombus ABCD are 16 cm and 12 cm. Find the side and perimeter of the rhombus.

Solution:

In rhombus ABCD,



$l(AC) = 16 \text{ cm}$  and  $l(BD) = 12 \text{ cm}$ .

Let the diagonals of rhombus ABCD intersect at point O.

$l(AO) = \frac{1}{2} l(AC)$

...[Diagonals of a rhombus bisect each other]

$\therefore l(AO) = \frac{1}{2} \times 16$

$\therefore l(AO) = 8 \text{ cm}$

Also,  $l(BO) = \frac{1}{2} l(BD)$

...[Diagonals of a rhombus bisect each other]

$\therefore l(BO) = \frac{1}{2} \times 12$

$\therefore l(BO) = 6 \text{ cm}$

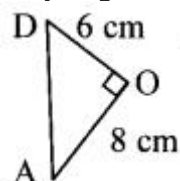
In  $\triangle DOA$ ,

$m\angle DOA = 90^\circ$

...[Diagonals of a rhombus are perpendicular to each other]

$[l(AD)]^2 = [l(AO)]^2 + [l(BO)]^2$

...[Pythagoras theorem]



$= (8)^2 + (6)^2$

$= 64 + 36$

$\therefore [l(AD)]^2 = 100$

$\therefore l(AD) = \sqrt{100}$

... [Taking square root of both sides]

$\therefore l(AD) = 10 \text{ cm}$

$\therefore l(AB) = l(BC) = l(CD) = l(AD) = 10 \text{ cm}$

...[Sides of a rhombus are congruent]

Perimeter of rhombus ABCD

$= l(AB) + l(BC) + l(CD) + l(AD)$

$= 10 + 10 + 10 + 10$

$= 40 \text{ cm}$

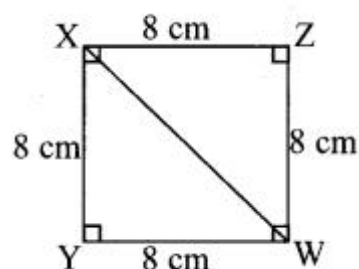
$\therefore$  The side and perimeter of the rhombus are 10 cm and 40 cm respectively.

Question 6.

Find the length of diagonal of a square with side 8 cm.

Solution:

Let  $\square XYWZ$  be the square of side 8cm.



seg XW is a diagonal.

In  $\triangle XYW$ ,

$$m\angle XYW = 90^\circ$$

... [Angle of a square]

$$\therefore [l(XW)]^2 = [l(XY)]^2 + [l(YW)]^2$$

...[Pythagoras theorem]

$$= (8)^2 + (8)^2$$

$$= 64 + 64$$

$$\therefore [l(XW)]^2 = 128$$

$$\therefore l(XW) = \sqrt{128}$$

...[Taking square root of both sides]

$$= \sqrt{64 \times 2}$$

$$= 8\sqrt{2} \text{ cm}$$

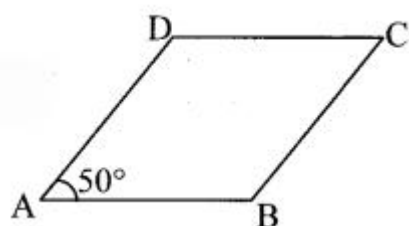
$\therefore$  The length of the diagonal of the square is  $8\sqrt{2}$  cm.

Question 7.

Measure of one angle of a rhombus is  $50^\circ$ , find the measures of remaining three angles.

Solution:

Let  $\square ABCD$  be the rhombus.



$$m\angle A = 50^\circ$$

$$m\angle C = m\angle A$$

...[Opposite angles of a rhombus are congruent]

$$\therefore m\angle C = 50^\circ$$

Also,  $m\angle D = m\angle B$  ... (i)

...[Opposite angles of a rhombus are congruent]

In  $\square ABCD$ ,

$$m\angle A + m\angle B + m\angle C + m\angle D = 360^\circ$$

...[Sum of the measures of the angles of a quadrilateral is  $360^\circ$ ]

$$\therefore 50^\circ + m\angle B + 50^\circ + m\angle D = 360^\circ$$

$$\therefore m\angle B + m\angle D + 100^\circ = 360^\circ$$

$$\therefore m\angle B + m\angle D = 360^\circ - 100^\circ$$

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$$\therefore m\angle B + m\angle B = 260^\circ \dots[\text{From (i)}]$$

$$\therefore 2m\angle B = 260^\circ$$

$$\therefore m\angle B = \frac{260}{2}$$

$$\therefore m\angle B = 130^\circ$$

$$\therefore m\angle D = m\angle B = 130^\circ \dots[\text{From (i)}]$$

$\therefore$  The measures of the remaining angles of the rhombus are  $130^\circ$ ,  $50^\circ$  and  $130^\circ$ .

### Maharashtra Board Class 8 Maths Chapter 8 Quadrilateral: Constructions and Types Practice Set 8.2 Intext Questions and Activities

Question 1.

Construct a rectangle PQRS by taking two convenient adjacent sides. Name the point of intersection of diagonals as T. Using divider and ruler, measure the following lengths.

i. lengths of opposite sides, seg QR and seg PS.

ii. lengths of seg PQ and seg SR.

iii. lengths of diagonals PR and QS.

iv. lengths of seg PT and seg TR, which are parts of the diagonal PR.

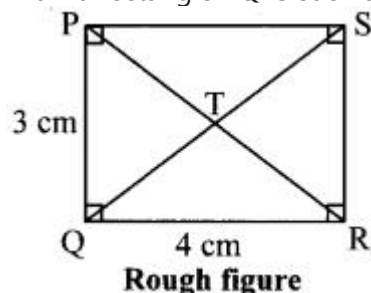
v. lengths of seg QT and seg TS, which are parts of the diagonal QS.

Observe the measures. Discuss about the measures obtained by your classmates.

(Textbook pg. no. 44)

Solution:

Draw a rectangle PQRS such that,  $l(PQ) = 3 \text{ cm}$  and  $l(QR) = 4 \text{ cm}$ .



Steps of construction:

i. As shown in the rough figure, draw seg QR of length 4 cm.

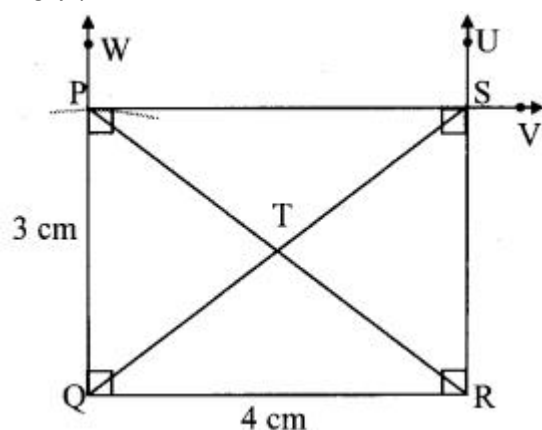
ii. Placing the centre of the protractor at point Q, draw ray QW making an angle of  $90^\circ$  with seg QR.

iii. By taking a distance of 3 cm on the compass and placing it at point Q, draw an arc on ray QW. Name the point as P.

iv. Draw ray PV and ray RU making an angle of  $90^\circ$  with seg PQ and seg QR respectively.

v. Name the point of intersection of ray PV and ray RU as S.

$\square$ PQRS is the required rectangle.



From the figure,

- i.  $l(QR) = l(PS) = 4 \text{ cm}$
- ii.  $l(PQ) = l(SR) = 3 \text{ cm}$
- iii.  $l(PR) = l(QS) = 5 \text{ cm}$
- iv.  $l(PT) = l(TR) = 2.5 \text{ cm}$
- v.  $l(QT) = l(TS) = 2.5 \text{ cm}$

From the above measures, we can say that for any rectangle,

- i. Opposite sides are congruent.
- ii. Diagonals are congruent.
- iii. Diagonals bisect each other.

Question 2.

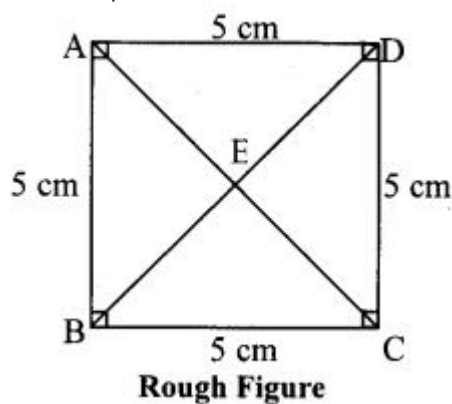
Draw a square by taking convenient length of side. Name the point of intersection of its diagonals as E. Using the apparatus in a compass box, measure the following lengths.

- i. lengths of diagonal AC and diagonal BD.
- ii. lengths of two parts of each diagonal made by point E.
- iii. all the angles made at the point E.
- iv. parts of each angle of the square made by each diagonal, (e.g.  $\angle ADB$  and  $\angle CDB$ ).

Observe the measures. Also observe the measures obtained by your classmates and discuss about them. (Textbook pg. no. 44)

Solution:

Draw a square ABCD such that its side is 5cm



Steps of construction:

- i. As shown in the rough figure, draw seg BC of length 5 cm.
- ii. Placing the centre of the protractor at point B, draw ray BP making an angle of  $90^\circ$  with seg BC.

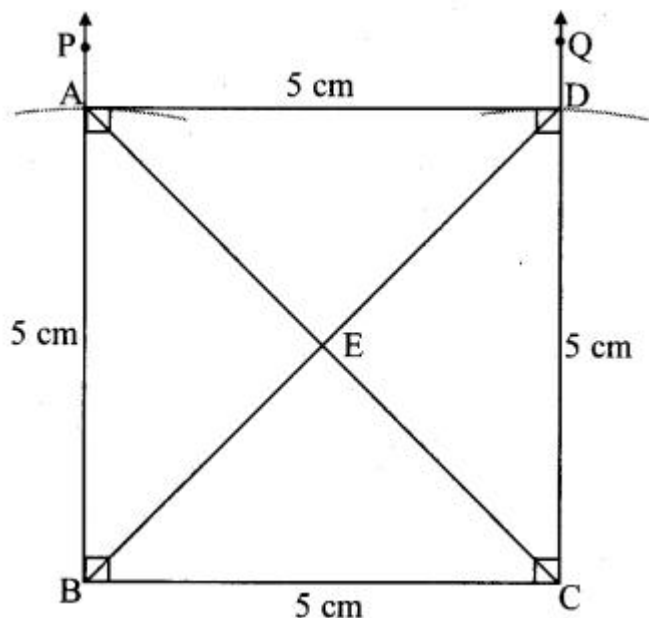
iii. By taking a distance of 5 cm on the compass and placing it at point B, draw an arc on ray BP. Name the point as A.

iv. Placing the centre of the protractor at point C, draw ray CQ making an angle of  $90^\circ$  with seg BC.

v. By taking a distance of 5 cm on the compass and placing it at point C, draw an arc on ray CQ. Name the point as D.

vi. Draw seg AD.

$\square ABCD$  is the required square.



From the figure,

i.  $l(AC) = l(BD) \approx 7\text{cm}$

ii.  $l(AE) = l(EC) \approx 3.5\text{cm}$ ,

$l(BE) = l(ED) \approx 3.5\text{cm}$

iii.  $m\angle AED = m\angle BEC = m\angle CED = m\angle BEA = 90^\circ$

iv. Angles made by diagonal AC:

$m\angle BAC = m\angle DAC = 45^\circ$

$m\angle BCA = m\angle DCA = 45^\circ$

Angles made by diagonal BD:

$m\angle ABD = m\angle CBD = 45^\circ$

$m\angle ADB = m\angle CDB = 45^\circ$

From the above measures, we can say that for any square,

i. Diagonals are congruent.

ii. Diagonals bisect each other.

iii. Diagonals are perpendicular to each other.

iv. Diagonals bisect the opposite angles.

Question 3.

Draw a rhombus EFGH by taking convenient length of side and convenient measure of an angle.

Draw its diagonals and name their point of Intersection as M.

i. Measure the opposite angles of the quadrilateral and angles at the point M.

ii. Measure the two parts of every angle made by the diagonal.

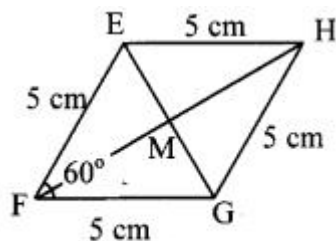


iii. Measure the lengths of both diagonals. Measure the two parts of diagonals made by point M.

Observe the measures. Also observe the measures obtained by your classmates and discuss about them. (Textbook pg. no. 45)

Solution:

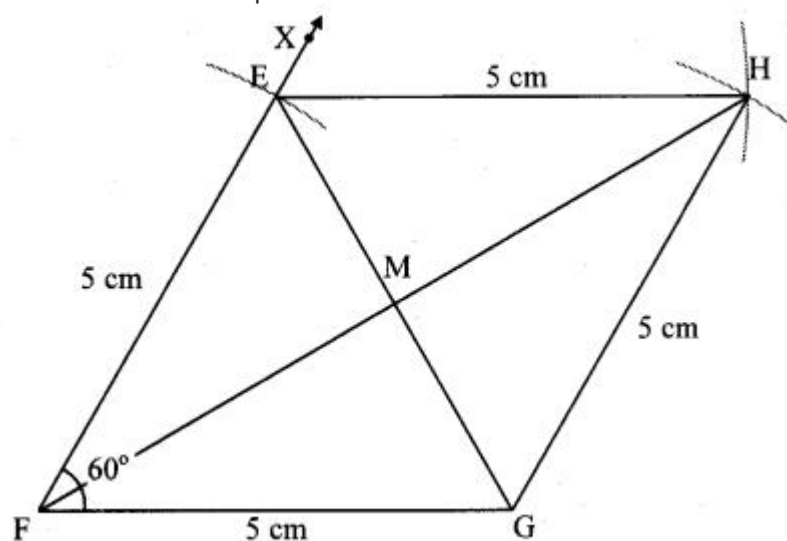
Draw a rhombus EFGH such that its side is 5 cm and  $m\angle F = 60^\circ$ .



**Rough Figure**

Steps of construction:

- As shown in the rough figure, draw seg FG of length 5 cm.
- Placing the centre of the protractor at point F, draw ray FX making an angle  $60^\circ$  with seg FG.
- By taking a distance of 5 cm on the compass and placing it at point F, draw an arc on ray FX. Name the point as E.
- By taking a distance of 5 cm on the compass and placing it at point E and point G, draw arcs. Name the point of intersection of arcs as H.  $\square EFGH$  is the required rhombus.



From the figure,

i. Opposite angles:

$$m\angle EFG = m\angle GHE = 60^\circ,$$

$$m\angle FEH = m\angle HGF = 120^\circ$$

Angles at the point M:

$$m\angle EMF = m\angle FMG = m\angle GMH = m\angle HME = 90^\circ$$

ii. Angles made by diagonal FH:

$$m\angle EFH = m\angle GFH = 30^\circ \quad m\angle EHF = m\angle GHF = 30^\circ$$

Angles made by diagonal EG:

$$m\angle FEG = m\angle HEG = 60^\circ \quad m\angle FGE = m\angle HGE = 60^\circ$$

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iii.  $l(FH) \approx 8.6$  cm

$l(EG) = 5$  cm

$l(FM) = l(HM) \approx 4.3$  cm

$l(EM) = l(GM) \approx 2.5$  cm

From the above measures, we can say that for any rhombus,

i. Opposite angles are congruent.

ii. Diagonals bisect the opposite angles.

iii. Diagonals bisect each other and they are perpendicular to each other.

## Practice Set 8.3 8th Std Maths Answers Chapter 8 Quadrilateral: Constructions and Types

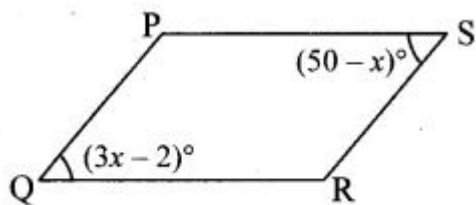
Question 1.

Measures of opposite angles of a parallelogram are  $(3x - 2)^\circ$  and  $(50 - x)^\circ$ . Find the measure of its each angle.

Solution:

Let  $\square PQRS$  be the parallelogram.

$m\angle Q = (3x - 2)^\circ$  and  $m\angle S = (50 - x)^\circ$



$$m\angle Q = m\angle S$$

.....(i)

[Opposite angles of a parallelogram are congruent]

$$\therefore 3x - 2 = 50 - x$$

$$\therefore 3x + x = 50 + 2$$

$$\therefore 4x = 52$$

$$\therefore x = 524$$

$$\therefore x = 13$$

$$\text{Now, } m\angle Q = (3x - 2)^\circ$$

$$= (3 \times 13 - 2)^\circ = (39 - 2)^\circ = 37^\circ$$

$$\therefore m\angle S = m\angle Q = 37^\circ \dots[\text{From(i)}]$$

$$m\angle P + m\angle Q = 180^\circ$$

....[Adjacent angles of a parallelogram are supplementary]

$$\therefore m\angle P + 37^\circ = 180^\circ$$

$$\therefore m\angle P = 180^\circ - 37^\circ = 143^\circ$$

$$\therefore m\angle R = m\angle P = 143^\circ$$

.....[Opposite angles of a parallelogram are congruent]

$\therefore$  The measures of the angles of the parallelogram are  $37^\circ$ ,  $143^\circ$ ,  $37^\circ$  and  $143^\circ$ .

## Question 2.

Referring the given figure of a parallelogram, write the answers of questions given below.

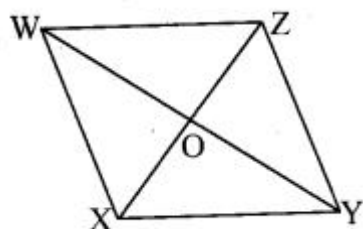
i. If  $l(WZ) = 4.5$  cm, then  $l(XY) = ?$

ii. If  $l(YZ) = 8.2$  cm, then  $l(XW) = ?$

iii. If  $l(OX) = 2.5$  cm, then  $l(OZ) = ?$

iv. If  $l(WO) = 3.3$  cm, then  $l(WY) = ?$

v. If  $m\angle WZY = 120^\circ$ , then  $m\angle WXY = ?$  and  $m\angle XWZ = ?$



Solution:

i.  $l(WZ) = 4.5$  cm ... [Given]

$l(XY) = l(WZ)$  ....[Opposite sides of a parallelogram are congruent]

$$\therefore l(XY) = 4.5\text{cm}$$

ii.  $l(YZ) = 8.2$  cm ...[Given]

$$l(XW) = l(YZ)$$

....[Opposite sides of a parallelogram are congruent]

$$\therefore l(XW) = 8.2\text{cm} \dots [\text{Given}]$$

iii.  $l(OX) = 2.5$  cm ...[Given]

$$l(OZ) = l(OX)$$

....[Diagonals of a parallelogram bisect each other]

$$\therefore l(OZ) = 2.5\text{cm}$$

iv.  $l(WO) = 3.3$  cm ... [Given]

$$l(WO) = \frac{1}{2} l(WY)$$

....[Diagonals of a parallelogram bisect each other]

$$\therefore 3.3 = \frac{1}{2} l(WY)$$

$$\therefore 3.3 \times 2 = l(WY)$$

$$\therefore l(WY) = 6.6\text{cm}$$

v.  $m\angle WZY = 120^\circ$  ... [Given]

$$m\angle WXY = m\angle WZY$$

.....[Opposite angles of a parallelogram are congruent]

$$\therefore m\angle WXY = 120^\circ \dots (i)$$

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$$m\angle XWZ + m\angle WXY = 180^\circ$$

...[Adjacent angles of a parallelogram are supplementary]

$$\therefore m\angle XWZ + 120^\circ = 180^\circ \dots [\text{From (i)}]$$

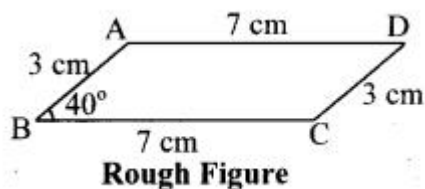
$$\therefore m\angle XWZ = 180^\circ - 120^\circ$$

$$\therefore m\angle XWZ = 60^\circ$$

Question 3.

Construct a parallelogram ABCD such that  $l(BC) = 7 \text{ cm}$ ,  $m\angle ABC = 40^\circ$ ,  $l(AB) = 3 \text{ cm}$

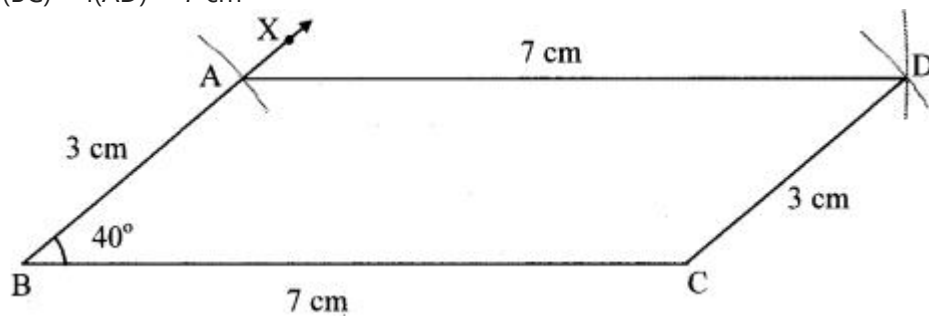
Solution:



Opposite sides of a parallelogram are congruent.

$$\therefore l(AB) = l(CD) = 3 \text{ cm}$$

$$l(BC) = l(AD) = 7 \text{ cm}$$



Question 4.

Ratio of consecutive angles of a quadrilateral is  $1 : 2 : 3 : 4$ . Find the measure of its each angle. Write with reason, what type of a quadrilateral it is.

Solution:

Let  $\square PQRS$  be the quadrilateral.

Ratio of consecutive angles of a quadrilateral is  $1 : 2 : 3 : 4$ .

Let the common multiple be  $x$ .

$$\therefore m\angle P = x^\circ, m\angle Q = 2x^\circ, m\angle R = 3x^\circ \text{ and } m\angle S = 4x^\circ$$

In  $\square PQRS$ ,

$$m\angle P + m\angle Q + m\angle R + m\angle S = 360^\circ$$

...[Sum of the measures of the angles of a quadrilateral is  $360^\circ$ ]

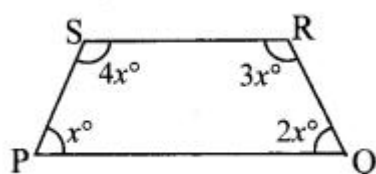
$$\therefore x^\circ + 2x^\circ + 3x^\circ + 4x^\circ = 360^\circ$$

$$\therefore 10x^\circ = 360^\circ$$

$$\therefore x^\circ = \frac{360}{10}$$

$$\therefore x^\circ = 36^\circ$$

$$\therefore m\angle P = x^\circ = 36^\circ$$



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$$m\angle Q = 2x^\circ = 2 \times 36^\circ = 72^\circ$$

$$m\angle R = 3x^\circ = 3 \times 36^\circ = 108^\circ \text{ and}$$

$$m\angle S = 4x^\circ = 4 \times 36^\circ = 144^\circ$$

$\therefore$  The measures of the angles of the quadrilateral are  $36^\circ, 72^\circ, 108^\circ, 144^\circ$ .

$$\text{Here, } m\angle P + m\angle S = 36^\circ + 144^\circ = 180^\circ$$

Since, interior angles are supplementary,

$\therefore$  side PQ  $\parallel$  side SR

$$m\angle P + m\angle Q = 36^\circ + 72^\circ = 108^\circ \neq 180^\circ$$

$\therefore$  side PS is not parallel to side QR.

Since, one pair of opposite sides of the given quadrilateral is parallel.

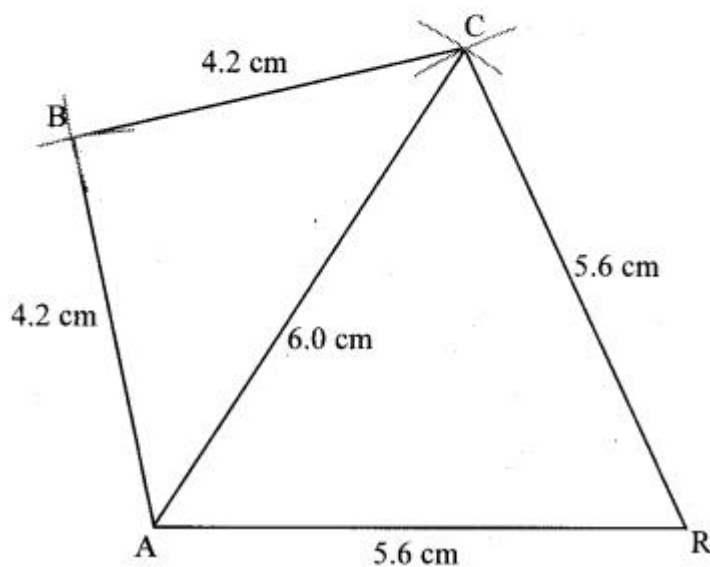
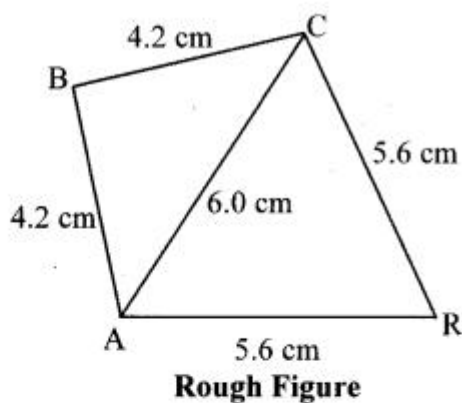
$\therefore$  The given quadrilateral is a trapezium.

Question 5.

Construct  $\square$ BARC such that

$$l(BA) = l(BC) = 4.2 \text{ cm, } l(AC) = 6.0 \text{ cm, } l(AR) = l(CR) = 5.6 \text{ cm}$$

Solution:

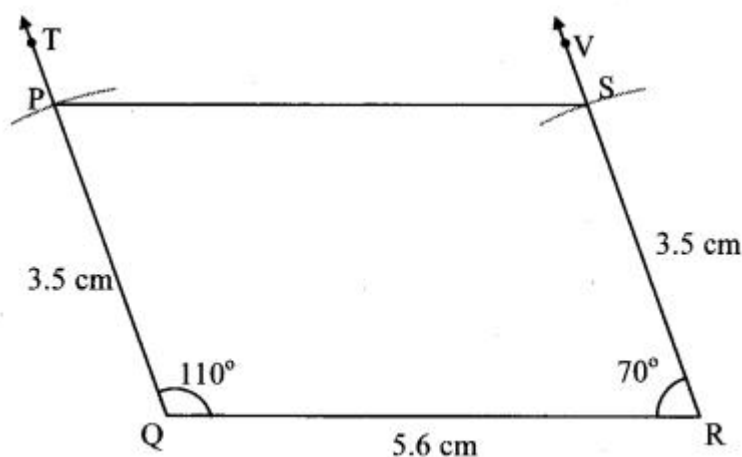
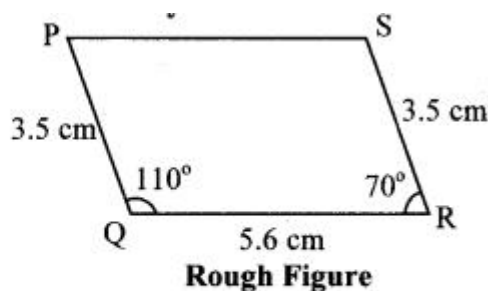


Question 6.

Construct  $\square$ PQRS, such that  $l(PQ) = 3.5 \text{ cm, } l(QR) = 5.6 \text{ cm, } l(RS) = 3.5 \text{ cm, } m\angle Q = 110^\circ$ ,

$m\angle R = 70^\circ$ . If it is given that PQRS is a parallelogram, which of the given information is unnecessary?

Solution:



1. Since, the opposite sides of a parallelogram are congruent.  
 $\therefore$  Either  $l(PQ)$  or  $l(SR)$  is required.
2. To construct a parallelogram lengths of adjacent sides and measure of one angle is required.  
 $\therefore$  Either  $l(PQ)$  and  $m\angle Q$  or  $l(SR)$  and  $m\angle R$  is the unnecessary information given in the question.

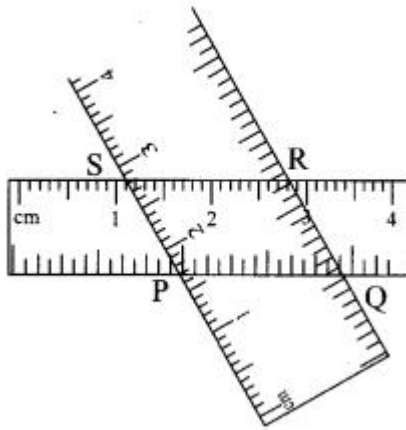
**Maharashtra Board Class 8 Maths Chapter 8 Quadrilateral: Constructions and Types Practice Set 8.3 Intext Questions and Activities**

Question 1.

Draw a parallelogram PQRS. Take two rulers of different widths, place one ruler horizontally and draw lines along its edges. Now place the other ruler in slant position over the lines drawn and draw lines along its edges. We get a parallelogram. Draw the diagonals of it and name the point of intersection as T.

1. Measure the opposite angles of the parallelogram.
2. Measure the lengths of opposite sides.
3. Measure the lengths of diagonals.
4. Measure the lengths of parts of the diagonals made by point T. (Textbook pg. no. 47)

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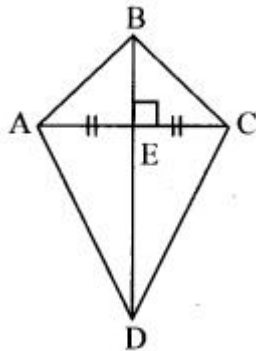


Solution:

[Students should attempt the above activities on their own.]

Question 2.

In the given figure of  $\square ABCD$ , verify with a divider that  $\text{seg } AB \cong \text{seg } CB$  and  $\text{seg } AD \cong \text{seg } CD$ . Similarly measure  $\angle BAD$  and  $\angle BCD$  and verify that they are congruent.  
(Textbook pg. no. 48)



Solution:

[Students should attempt the above activities on their own.]