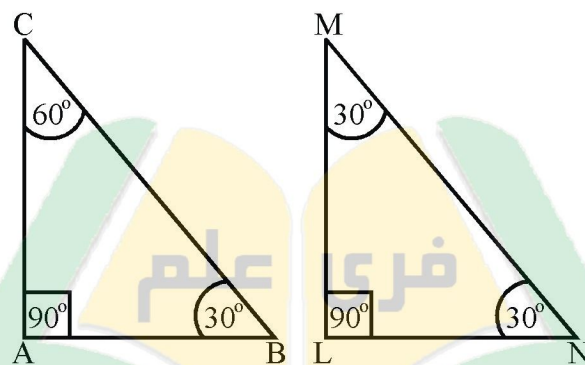


Review Exercise 10

Q.1 Which of the following are true and which are false.

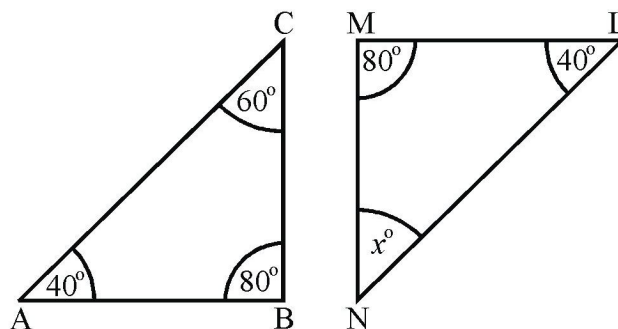
- | | | |
|-------|---|---------|
| (i) | A ray has two end points. | (False) |
| (ii) | In a triangle there can be only are right angle. | (True) |
| (iii) | Three points are said to be collinear if they lie on same line. | (True) |
| (iv) | Two parallel lines intersect at a point. | (False) |
| (v) | Two line can intersect only one point. | (True) |
| (vi) | A triangle of congruent sides has non-congruent angles. | (False) |

Q.2 In $\triangle ABC \cong \triangle LMN$, then



- (i) $m\angle M \cong m\angle B = 30^\circ$
 (ii) $m\angle N \cong m\angle C = 60^\circ$
 (iii) $m\angle A \cong m\angle L = 90^\circ$

Q.3 If $\triangle ABC \cong \triangle LMN$ then find the value of x



$$m\angle N = m\angle C = 60^\circ$$

$$m\angle N = x = 60^\circ$$

Sum of three angle in a triangle is 180

$$\text{So } x + 80 + 40 = 180$$

$$x + 120 = 180$$

$$x = 180 - 120$$

$$x = 60^\circ$$

Q.4 Find the value of unknowns for the given congruent triangles.

It is an isosceles triangle

$$m\overline{AB} = m\overline{AC}$$

$$\text{and } m\angle B = m\angle C$$

when we draw a perpendicular from point A to BC it Bisect

$$\text{So } \overline{BD} \cong \overline{DC}$$

$$5m - 3 = 2m + 6$$

$$5m - 2m = 6 + 3$$

$$3m = 9$$

$$m = \frac{9}{3}$$

$$m = 3$$

opposite angle are congruent

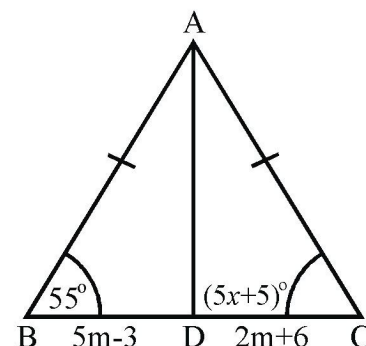
$$\therefore \angle B = \angle C$$

$$55 = 5x + 5$$

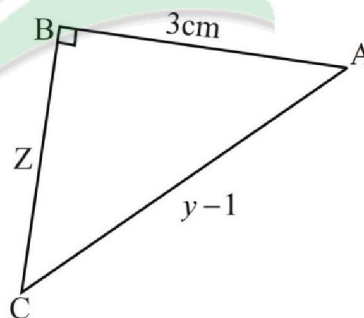
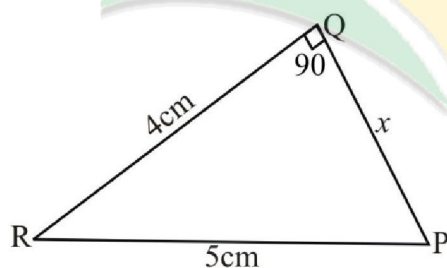
$$55 - 5 = 5x$$

$$\frac{50}{5} = x$$

$$x = 10$$



Q.5 If $\triangle PQR \cong \triangle ABC$, the find the unknowns



By using definition of congruent triangles.

$$\overline{RP} = \overline{AC}$$

$$5 = y - 1$$

$$5 + 1 = y$$

$$y = 6\text{cm}$$

$$\overline{AB} = \overline{QP}$$

$$3\text{cm} = x$$

Or

$$x = 3\text{cm}$$

$$\overline{BC} = \overline{QR}$$

$$Z = 4\text{cm}$$

Last Updated: September 2020

Report any mistake at freeilm786@gmail.com