Exercise 16A

Q7

Answer :

Let $3\angle A = 4\ \angle B = 6\ \angle C = x$

Then, we have:

$\angle A = \frac{x}{3}, \angle B = \frac{x}{4}, \angle C = \frac{x}{6}$

$\text{But, } \angle A + \angle B + \angle C = 180^\circ$

$\therefore \frac{x}{3} + \frac{x}{4} + \frac{x}{6} = 180^\circ$

$\text{or } \frac{4x + 3x + 2x}{12} = 180^\circ$

$\text{or } 9x = 180^\circ \times 12 = 2160^\circ$

$\text{or } x = 240^\circ$

$\therefore \angle A = \frac{240}{3} = 80^\circ, \angle B = \frac{240}{4} = 60^\circ, \angle C = \frac{240}{6} = 40^\circ$

Q9

Answer :

Equilateral Triangle: A triangle whose all three sides are equal in length and each of the three angles measures 60°.

Isosceles Triangle: A triangle whose two sides are equal in length and the angles opposite them are equal to each other.

Scalene Triangle: A triangle whose all three sides and angles are unequal in measure.

(i) Isosceles

AC = CB = 2 cm

(ii) Isosceles

DE = EF = 2.4 cm

(iii) Scalene

All the sides are unequal.

(iv) Equilateral

XY = YZ = ZX = 3 cm

(v) Equilateral

All three angles are 60º.

(vi) Isosceles

Two angles are equal in measure.

(vii) Scalene

All the angles are unequal.

Q10

Answer :

********** END **********