

# Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date: .....

Name: .....

ID No.....

## Multiple Choice Questions

1. It is given that ar  $(\triangle ABC) = 81$  square units and ar  $(\triangle DEF) = 64$  square units. If  $\triangle ABC \sim \triangle DEF$ , then

(a)  $\frac{AB}{DE} = \frac{81}{64}$

(b)  $\frac{AB^2}{DE^2} = \frac{9}{8}$

(c)  $\frac{AB}{DE} = \frac{9}{8}$

(d) AB = 81 units, DE = 64 units

Sol.

2. If  $\triangle ABC \sim \triangle DEF$ ,  $\frac{\text{ar}(\triangle ABC)}{\text{ar}(\triangle DEF)} = \frac{9}{25}$ , BC = 21 cm, then EF is equal to

(a) 9 cm

(b) 6 cm

(c) 35 cm

(d) 25 cm

Sol.

3. 15.  $\triangle ABC$  and  $\triangle BDE$  are two equilateral triangles such that D is the mid-point of BC. Ratio of the area of triangles ABC and BDE is

(a) 2 : 1

(b) 1 : 2

(c) 1 : 4

(d) 4 : 1

Sol.

4. In  $\triangle DABC$ , if AB =  $6\sqrt{3}$  cm, AC = 12 cm and BC = 6 cm, then  $\angle B$  is

(a)  $120^\circ$

(b)  $60^\circ$

(c)  $90^\circ$

(d)  $45^\circ$

Sol.