

Activity Worksheet

Challenging brain

Sub : Mathematics

Grade: X

Date:

Name:

ID No.....

Tick the correct answer for each of the following:

- i. P and Q are respectively the points on the sides DE and DF of triangle DEF such that DE = 6 cm, PE = 2.5, DQ = 6.3 cm and PQ||EF. Then, length of QF (in cm) is
- (a) 5 cm (b) 12 cm (c) 4.5 cm (d) 4 cm

Sol.

- ii. If in two triangles DEF and XYZ, $\frac{DF}{YZ} = \frac{ED}{XY} = \frac{EF}{XZ}$, then
- (a) $\triangle DEF \sim \triangle XYZ$ (b) $\triangle DFE \sim \triangle XYZ$
(c) $\triangle FED \sim \triangle ZXY$ (d) $\triangle EFD \sim \triangle XYZ$

Sol.

- iii. If $\triangle ABC \sim \triangle DEF$ and $\frac{DF}{AC} = \frac{2}{5}$ then $\frac{ar(\triangle ABC)}{ar(\triangle DEF)}$ is equal to

- (a) $\frac{5}{2}$ (b) $\frac{2}{5}$
(c) $\frac{4}{25}$ (d) $\frac{25}{4}$

Sol.
