

The area of a triangle with vertices A (3, 0), B (7, 0) and C (8, 4) is:

- Question:
- A. 14
 - B. 28
 - C. 8
 - D. 6

Answer:

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times [x_1(y_2 - y_3) + x_2(y_3 - y_1) + x_3(y_1 - y_2)] \\ &= \frac{1}{2} \times [3(0 - 4) + 7(4 - 0) + 8(0 - 0)] \\ &= \frac{1}{2} \times [-12 + 28] \\ &= \frac{1}{2} \times 16 \end{aligned}$$

$$\text{Area} = 8 \quad \text{sq. unit}$$

∴ Ans : Option (C)