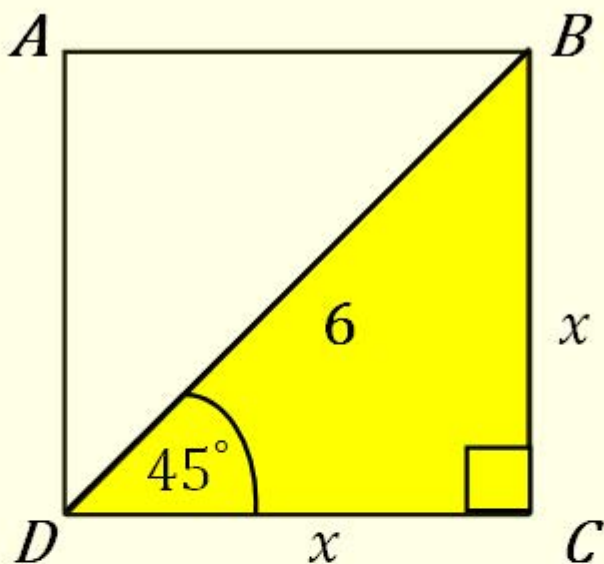


Method 4



$$\sin 45^\circ = \frac{x}{6}$$

$$\frac{1}{\sqrt{2}} = \frac{x}{6}$$

$$x = \frac{6}{\sqrt{2}}$$

$$x^2 = 18 \text{ (C) (Area of the square } x \times x = x^2)$$