

27th October



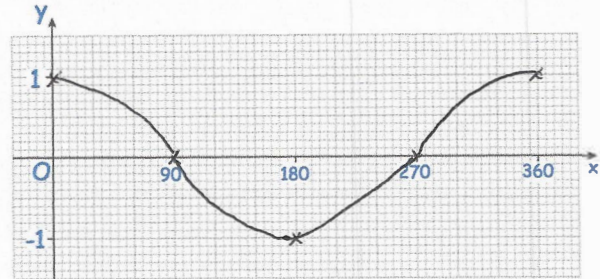
Corbettm0ths

Evaluate

$$64^{-\frac{2}{3}}$$

$$\frac{1}{16}$$

Sketch the graph of $y = \cos x$ for $0 \leq x \leq 360$.



Simplify

$$\sqrt{75} + \sqrt{48}$$

$$\sqrt{25} \times \sqrt{3} + \sqrt{16} \times \sqrt{3}$$

$$5\sqrt{3} + 4\sqrt{3}$$

$$9\sqrt{3}$$

The curve $y = x^2 - 3x - 4$ is reflected in the y-axis.

Find the equation of the new curve.

$$y = (-x)^2 - 3(-x) - 4$$

$$y = x^2 + 3x - 4$$

Solve the simultaneous equations

$$2x + y - 7 = 0 \quad y = 7 - 2x$$

$$xy = 6$$

$$x(7 - 2x) = 6$$

$$7x - 2x^2 = 6$$

$$0 = 2x^2 - 7x + 6$$

$$x = 2 \quad \text{or} \quad x = \frac{3}{2}$$

$$y = 3 \quad \text{or} \quad y = 4$$

$$(2, 3) \quad \text{or} \quad \left(\frac{3}{2}, 4\right)$$

$$= (x-2)(2x-3)$$