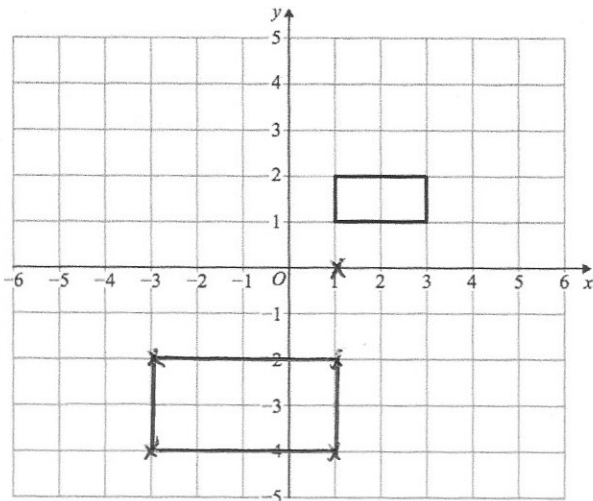


Simplify $\sqrt{96}$

$$\sqrt{16} \times \sqrt{6}$$

$$4\sqrt{6}$$



Enlarge the rectangle by scale factor -2 , using $(1, 0)$ as centre of enlargement.

Factorise fully $2 - 18x^2$

$$2(1 - 9x^2)$$

$$2(1 - 3x)(1 + 3x)$$

A cylinder has radius 5cm and length 10cm.

A sphere has the same volume as the cylinder.

What is the radius of the sphere?

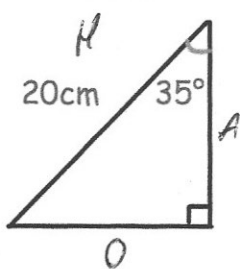
Cylinder $V = \pi r^2 h$

$$= \pi \times 5^2 \times 10$$

$$= 250\pi \text{ cm}^3$$

Sphere $250\pi = \frac{4}{3}\pi r^3$

$$r^3 = 187.5 \quad r = 5.72 \text{ cm}$$



$S^O H$

$$\sin(35) \times 20$$

$$O = 11.4715\dots$$

$$A^2 = H^2 - O^2$$

$$A^2 = 268.4\dots$$

$$A = 16.383\dots$$

Calculate the perimeter of the triangle.

$$20 + 16.383\dots + 11.4715\dots$$

$$47.85 \text{ cm}$$