



Write  $0.\dot{5}2$  as a fraction

$$x = 0.5222\dots$$

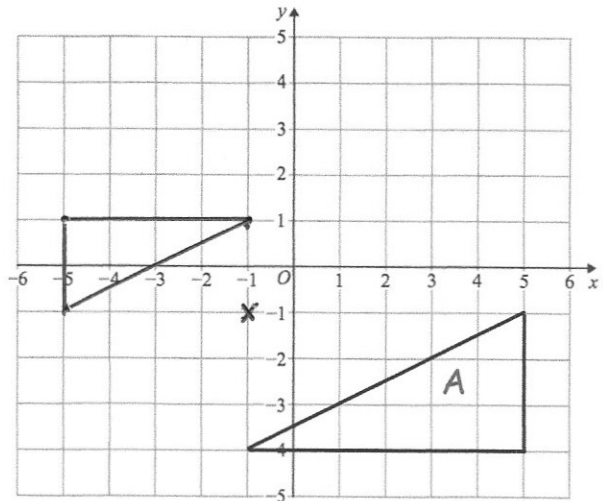
$$10x = 5.222\dots$$

$$100x = 52.222\dots$$

$$90x = 47$$

$$x = \frac{47}{90}$$

Enlarge triangle A using scale factor  $\frac{2}{3}$  and centre of enlargement  $(-1, -1)$



Is the point  $(-7, 30)$  above or below the line  $4x + y + 1 = 0$ ?

$$x = -7$$

$$-28 + y + 1 = 0$$

$$-27 + y = 0$$

$$y = 27$$

Above

Show

$$(x + 2)^2 - (x + 2) \equiv (x + 2)(x + 1)$$

$$(x + 2)(x + 2) - (x + 2)$$

$$x^2 + 4x + 4 - x - 2$$

$$x^2 + 3x + 2$$

$$(x + 2)(x + 1)$$

$$\underline{\underline{QED}}$$

A sphere has the same volume as the cone. Cone  $V = \frac{1}{3} \times \pi \times 5^2 \times 12 = 100\pi \text{ cm}^3$   
Calculate the radius of the sphere.

$$\frac{4}{3} \times \pi \times r^3 = 100\pi$$

$$\frac{4}{3} r^3 = 100$$

$$r^3 = 75$$

$$r = 4.217 \text{ cm}$$

