

Can a 1m rod fit inside this box?

$$x^2 = 40^2 + 85^2$$

$$x^2 = 8825 \quad x = 93.941... \text{ cm}$$

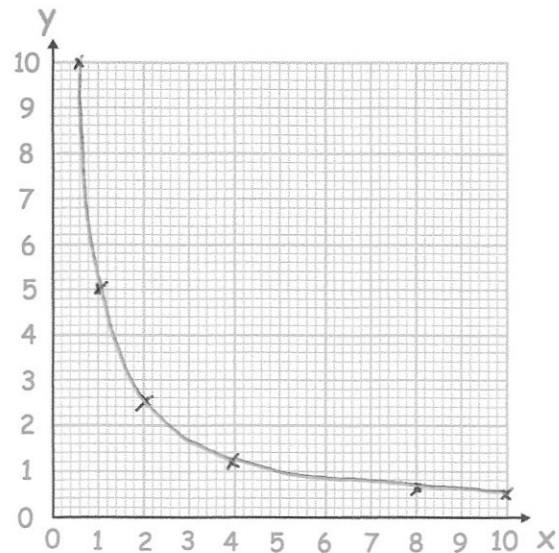
$$y^2 = 40^2 + 93.941...^2$$

$$y^2 = 10425 \quad y = 102.1 \text{ cm}$$

Complete the table of values for

$$y = \frac{5}{x}$$

x	0.5	1	2	4	8	10
y	10	5	2.5	1.25	0.625	0.5



On the grid, draw the graph of

$$y = \frac{5}{x}$$

for  $0.5 \leq x \leq 10$

Find where  $y = 4x + 5$  meets:

the y axis.

$(0, 5)$

the x axis.

$$0 = 4x + 5$$

$$-5 = 4x$$

$$x = -1.25$$

$(-1.25, 0)$

Solve the simultaneous equations

$$y = 13 - 4x$$

$$3x + 2y = 16$$

$$3x + 2(13 - 4x) = 16$$

$$3x + 26 - 8x = 16$$

$$-5x = -10$$

$$x = 2$$

$$y = 5$$