



The n th term of a sequence is

$$(n + 1)(n + 3)$$

Work out the first three terms of the sequence.

$$2 \times 4 = 8$$

$$3 \times 5 = 15$$

$$4 \times 6 = 24$$

Make y the subject of $6x - 2y = 10$

$$6x = 2y + 10$$

$$6x - 10 = 2y$$

$$y = 3x - 5$$

Are the lines $6x - 2y = 10$ and $y = -3x + 4$ parallel?

$$\downarrow$$

$$m = -3$$

$$\downarrow$$

$$m = 3$$

No

There are 30 students in class 1.
There are 18 students in class 2.

Both classes sit the same test.

The mean mark in class 1 is 80%.
The mean mark in class 2 is 62%

Work out the overall mean for both classes.

$$30 \times 80 = 2400$$

$$18 \times 62 = 1116$$

$$+ \quad \underline{\quad}$$

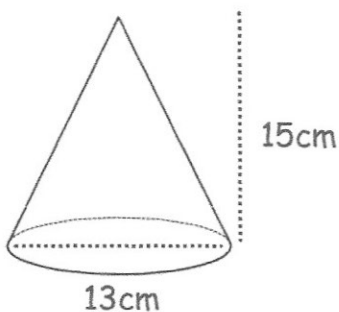
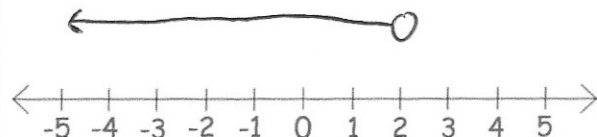
$$3516 \div 48 = 73.25\%$$

Solve $4x - 1 < 9 - x$

$$5x < 10$$

$$x < 2$$

Represent your answer on the number line



Calculate the volume of the cone.

$$\frac{1}{3} \times \pi \times 6.5^2 \times 15$$

$$= 663.661\dots \text{ cm}^3$$