

15th October

Higher 5-a-day



Corbettmaths

Find the pressure exerted by a force of 1400 newtons on an area of 20cm^2 .

$$1\text{m}^2 = 10000\text{cm}^2$$

Give your answer in newtons/ m^2

$$P = \frac{F}{A}$$

$$P = \frac{1400}{0.002} = 700000\text{ N/m}^2$$

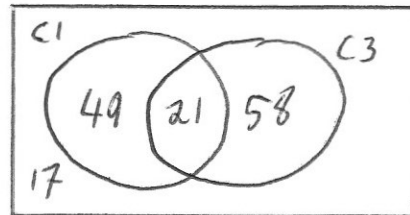
A group of 145 people surveyed about which TV channels they watched on Saturday.

70 watched Channel 1.

79 watched Channel 3.

17 watched neither.

Show this information in a Venn diagram

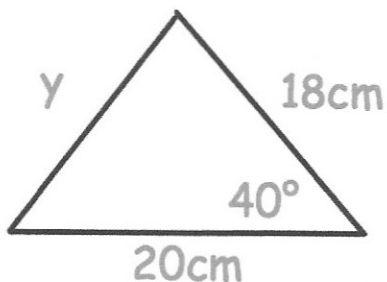


What is the probability that somebody who watched Channel 3 on Saturday, also watched Channel 1?

$$\frac{21}{79}$$

Expand $\sqrt{2}(\sqrt{3} - 4)$

$$\sqrt{6} - 4\sqrt{2}$$



Find y.

$$y^2 = 18^2 + 20^2 - 2 \times 18 \times 20 \times \cos 40$$

$$y^2 = 172.448$$

$$y = 13.13\text{ cm}$$