

15th October



Corbettmaths

Find the pressure exerted by a force of 1400 newtons on an area of 20cm².

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

Give your answer in newtons/m²

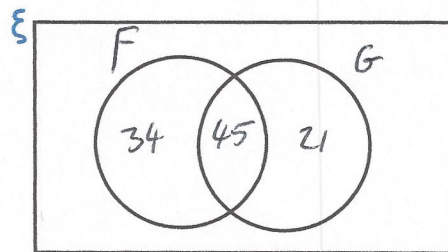
$$p = \frac{F}{A}$$

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

The students in a school sit two tests, a French test (F) and German test (G). Everyone passed at least one test. 79% passed the French test and 66% passed the German test.

Show this information in the Venn diagram

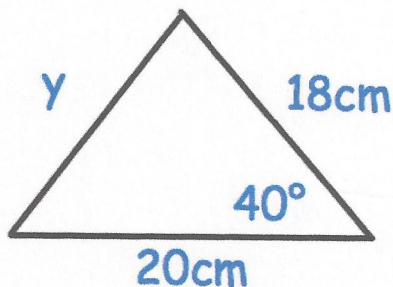


What is the probability that a student passed their French test, given they passed their German test?

$$\frac{45}{66} = \frac{15}{22}$$

Expand $\sqrt{2}(\sqrt{3} + 5)$

$$\sqrt{6} + 5\sqrt{2}$$



Find y.

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

$$y^2 = 172.448001$$

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