

20th October



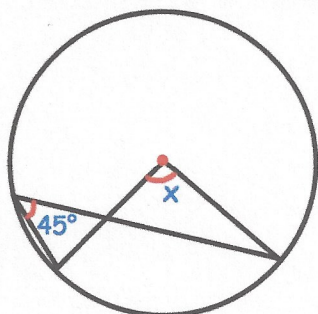
Corbettmaths

Work out $\sqrt{30} \times \sqrt{6}$

$$\sqrt{180}$$

$$\sqrt{36} \times \sqrt{5}$$

$$6\sqrt{5}$$



Find x

$$x = 90^\circ$$

A box contains apples and oranges in the ratio 2:3.

8 apples and 7 oranges are added to the box and the ratio of apples to oranges is now 3:4

How many pieces of fruit were in the box to begin with?

55

$$\frac{x}{y} = \frac{2}{3}$$

$$\frac{x+8}{y+7} = \frac{3}{4}$$

$$3x = 2y$$

$$4x + 32 = 3y + 21$$

$$4x - 3y = -11 \quad \times 2$$

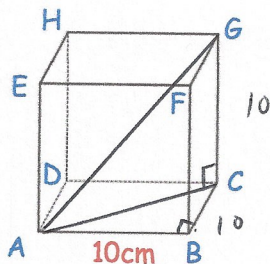
$$3x - 2y = 0 \quad \times 3$$

$$8x - 6y = -22$$

$$9x - 6y = 0 \quad \text{sub}$$

$$x = 22$$

$$y = 33$$



Shown is a cube.

Find the length of AG

$$AC^2 = 10^2 + 10^2$$

$$AC = 10\sqrt{2} \text{ cm}$$

$$AG^2 = (10\sqrt{2})^2 + 10^2$$

$$= 10\sqrt{3} = 17.32 \text{ cm}$$

D is directly proportional to P squared.

Sketch this graph.

