

May 9th

5-a-day

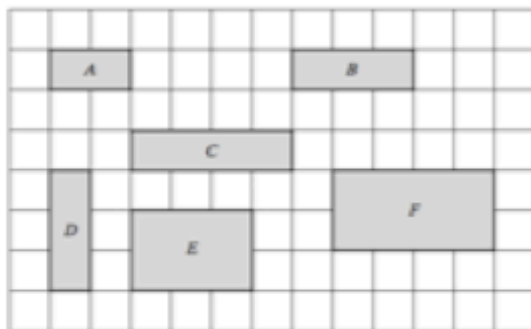
Numeracy

List the first 5 square numbers

1 4 9 16
25

List the first 5 prime numbers

2 3 5 7 11

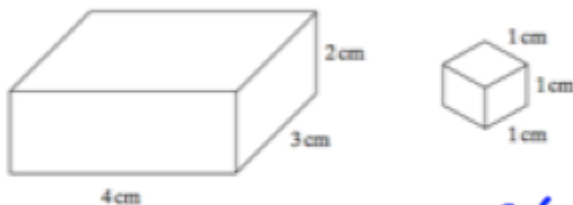


Which two rectangles are congruent?

B & D

Which two rectangles are similar?

A & F



How many centimetre cubes are needed to fill the box?

$$2 \times 3 \times 4 = 24 \text{ cm}^3$$

24

\$1.50 = £1

A pairs of trainers cost \$30 in New York or £18 in London.

Which is better value?

London by \$3

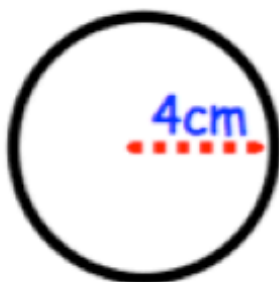
$$£18 \times 1.5 = \$27$$

Arrange in order, from smallest to largest

$$\frac{5}{6} \quad \frac{10}{12} \quad \frac{1}{3} \quad \frac{4}{12} \quad \frac{7}{12}$$

$$\frac{1}{3} \quad \frac{7}{12}$$

$$\frac{5}{6}$$

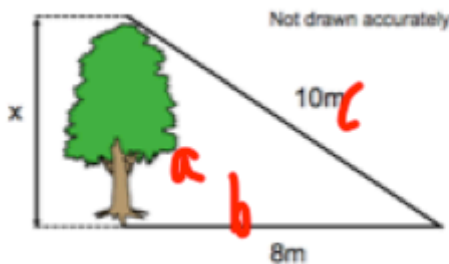


$$\pi \times 4^2$$

$$\pi \times 16$$

Work out the area.
Leave your answer in terms of pi.

$$16\pi \text{ cm}^2$$

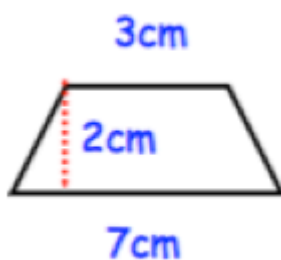


Use Pythagoras to calculate the height of the tree.

$$a^2 + b^2 = c^2$$

$$x^2 + 8^2 = 10^2$$

$$x^2 = 36 \quad x = 6m$$



Calculate the area of the trapezium

$$\frac{1}{2}(3+7) \times 2$$

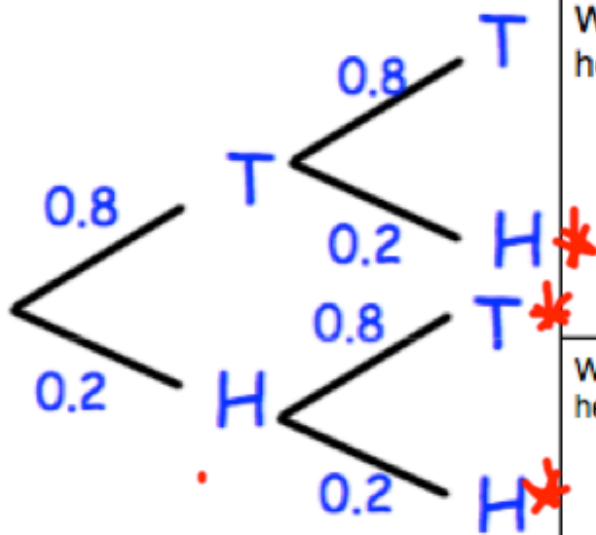
$$\frac{1}{2}(10) \times 2 \quad 10 \text{ cm}^2$$

Simplify

$$\sqrt{300}$$

$$\sqrt{100} \times \sqrt{3}$$

$$10\sqrt{3}$$



Work out the probability of two heads.

$$0.2 \times 0.2 = 0.04$$

Work out the probability of at least one head.

$$\begin{aligned} TH & 0.8 \times 0.2 = 0.16 \\ HT & 0.2 \times 0.8 = 0.16 \\ HH & 0.2 \times 0.2 = 0.04 \\ & = 0.36 \end{aligned}$$

A biased coin is flipped twice

A is directly proportional to B squared.

When A = 300, B = 10.

Write a formula for A in terms of B

$$A \propto B^2$$

$$A = kB^2$$

$$300 = k \times 10^2$$

$$k = 3$$

$$A = 3 \times B^2 \quad A = 3B^2$$

Write as a single fraction

$$\frac{3}{x+3} + \frac{5}{x+1}$$

$$\frac{3(x+1) + 5(x+3)}{(x+3)(x+1)}$$

$$= \frac{8x + 18}{(x+3)(x+1)}$$