

22nd May



Corbettmaths

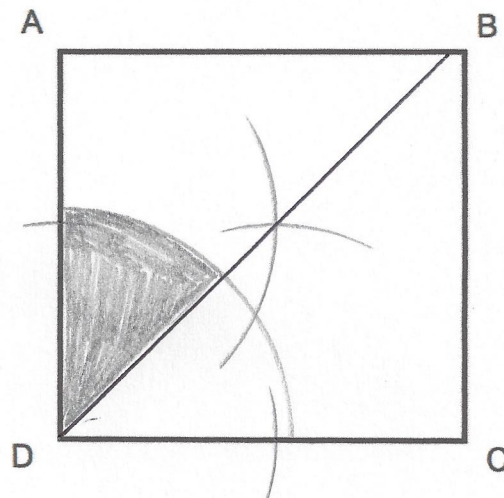
The ratio of red to yellow to blue sweets in a bag is 3:6:1

$$3 + 6 + 1 = 10$$

What fraction of the sweets are yellow?

$$\frac{6}{10} = \frac{3}{5}$$

A and B are two points.



Shade the region inside the rectangle, which is closer to AD than DC, and less than 3cm from D.

The ratio of copper to zinc in the alloy brass is 3:2 $4000 \div 5 = 800$
 $2400 \text{ kg of copper} \text{ \& } 1600 \text{ kg of zinc}$
 Copper costs \$4830 per tonne
 Zinc costs \$1846 per tonne

Work out the cost of 4 tonnes of brass.

$$\begin{array}{r} 2.4 \times 4830 = 11592 \\ 1.6 \times 1846 = 2953.6 \\ \hline \$14545.60 \end{array}$$

Solve these simultaneous equations

$$\begin{array}{r} 5x - 6y = 28 \quad \times 2 \\ 4x - 4y = 24 \quad \times 3 \\ \hline 10x - 12y = 56 \\ 12x - 12y = 72 \quad \text{sub} \\ \hline -2x = -16 \end{array}$$

$$\begin{array}{r} x = 8 \\ 40 - 6y = 28 \\ y = 2 \\ \hline x = 8 \quad y = 2 \end{array}$$