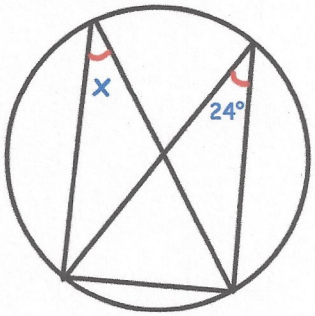
Name: _____ 5-a-day Higher

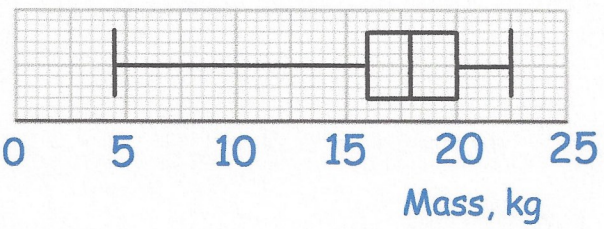
9th December

Corbettmaths



Find x

24°



Work out the interquartile range

$20 - 16 = 4$

Simplify

$$\frac{5x^2 - 13x - 6}{x^2 - 9}$$

$$\frac{(5x + 2)(x - 3)}{(x - 3)(x + 3)}$$

$$\frac{5x+2}{x+3}$$

A metal cylinder that has diameter 20cm and height 50cm is melted and used to create spheres of radius 4cm.

$V = \frac{4}{3}\pi r^3 = 268.0825...$

How many complete spheres can be created?

58

$V = \pi r^2 h$

$= \pi \times 10^2 \times 50$

$= 15707.96327$

$15707.96327 \div 268.0825...$

$= 58.5937...$

Work out

$16^{1.5} + 8^0$

$16^{\frac{3}{2}} + 1$

$64 + 1$

65