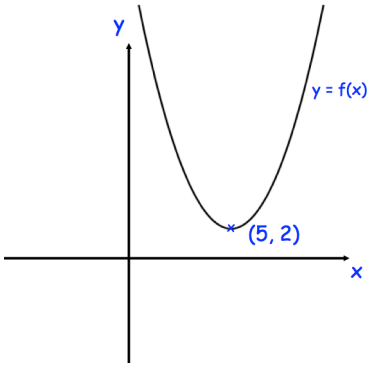
22nd January **Higher Plus 5-a-day**

Corbettmaths

A cuboid has length (x + 9)cm,
width (x + 2)cm and height 5cm.
The surface area of the cuboid is 400cm².

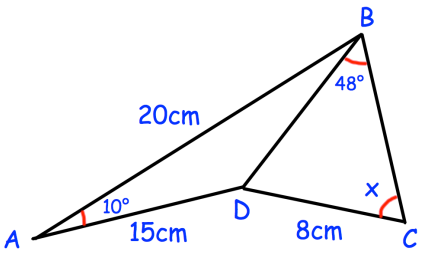
Find the value of x to 1 decimal place.



Shown is the curve with
equation y = f(x)
The coordinates of the minimum point of the curve are (5, 2).

Which transformation will have a minimum point of (–5, 2)?

Which transformation will have a minimum point of (8, 2)?



AB = 20cm AD = 15cm CD = 8cm
∠DAB = 10° ∠DBC = 48°

Find x

$$w = \frac{\sqrt{c}}{p}$$

c = 4.24 correct to 2 decimal places
p = 7.88 correct to 3 decimal places

By considering bounds, work out the value of w to a suitable degree of accuracy.