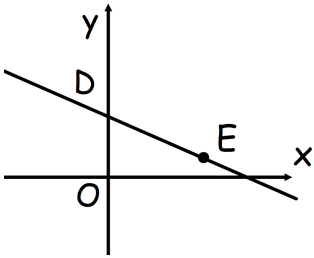




The volumes of two mathematically similar solids are in the ratio 8 : 125  
The surface area of the smaller solid is 24 cm<sup>2</sup>

Work out the surface area of the larger solid.



A straight line passes through the points D(0,10) and E (16, 2)

Find the equation of the line perpendicular to DE and passing through F(0, -8)

Find the shortest distance between the line passing through DE and the point F

$$a = \frac{c}{w}$$

$c = 120$  correct to 3 significant figures.  
 $w = 41.21$  correct to 2 decimal places.

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

Find the minimum point of the graph  
 $y = x^2 - 11x + 1$