

16th June

Corbettmaths

a is directly proportional to the cube of c .

w is inversely proportional to the square root of a

When $c = 2$, $a = 48$

When $a = 9$, $w = 2400$

Find the value of w when $c = 6$

The points D , E , F and G lie in a straight line.

$$DE : EG = 1 : 4$$

$$DF : FG = 9 : 11$$

Work out $DE : EF : FG$

Find the equation of the line that is perpendicular to $5x + y = 8$ and passes through the point $(3, 9)$

A rectangle has an area of $\sqrt{80} \text{ cm}^2$
The length of the rectangle is $(2 + \sqrt{5}) \text{ cm}$

Calculate the width.

Express your answer in the form

$$p + q\sqrt{5}$$