

7th July

Higher 5-a-day



Corbettmaths

Simplify fully

$$\frac{x^2 - 4}{2x^2 - x - 6}$$

$$\frac{(x/2)(x+2)}{(2x+3)(x/2)}$$

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

A varies indirectly to C^3

$$A \propto \frac{1}{C^3}$$

When $A = 4$, $C = 2$.

$$A = \frac{k}{C^3}$$

Find A when $C = 3$.

$$4 = \frac{k}{2^3}$$

$$k = 32$$

$$A = \frac{32}{27}$$

Find C when $A = 10$.

$$10 = \frac{32}{C^3}$$

$$10C^3 = 32$$

$$C^3 = 3.2$$

$$C = 1.474$$

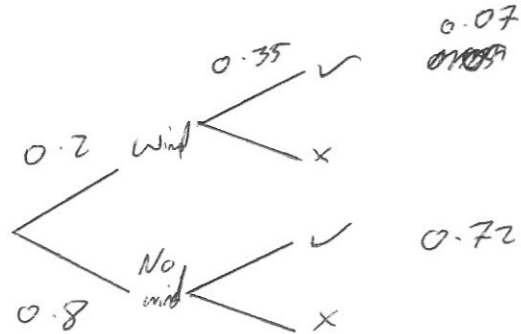
Timothy is taking part in an archery competition.

The probability of windy weather is 0.2

If it is windy, the probability of Timothy hitting the target is 0.35

The probability of it not being windy **and** Timothy hitting the target is 0.72

Find the probability of Timothy missing the target.



$$1 - 0.07 - 0.72$$

$$= 0.21$$

The line passing through $(1, p)$ and $(5, 1)$ has a gradient of $\frac{3}{4}$

Find the value of p .

$$p = -2$$

