

# Quick Test - Proportionality

1. Two variables are connected by the relationship  $y \propto x$ . When  $x = 0.2$ ,  $y = 1.8$ .

- a. Write a formula for  $y$  in terms of  $x$
- b. Work out  $y$  when  $x = 0.16$
- c. Work out  $x$  when  $y = 29$

2. The cost of petrol for a journey is directly proportional to the distance travelled. Joe travels 130 miles and spends £15 on petrol. Calculate

- a. The cost of petrol for a journey of 190 miles
- b. The length of a journey costing £12.75

3.  $A$  is inversely proportional to  $B$ . When  $A = 4$ ,  $B = 6$

- a. Write a formula for  $A$  in terms of  $B$
- b. Calculate  $B$  when  $A = 12$
- c. Calculate  $A$  when  $B = 0.4$