

Mixed Exercise 1

1 Write expressions for the following, giving your answers in the simplest form.

- (i) 30% of b (ii) $y\%$ of 450 (iii) $c\%$ of d

2 60% of $p = 40\%$ of q

Work out p as a percentage of q .

3 Write expressions for the following, giving your answers in the simplest form.

- (i) a increased by 20% (ii) b increased by 5%
(iii) k decreased by 35% (iv) m decreased by 2%

4 a increased by 80% is equal to b increased by 50%.

Show that $\frac{b}{a} = 1.2$.

5 p increased by 25% is equal to q decreased by 25%.

Work out p as a percentage of q .

6 $x : y = 2 : 3$ and $y : z = 4 : 9$

Work out $x : y : z$, giving your answer in the simplest form.

7 $a : b = 5 : 2$

- (i) Write a in terms of b .
(ii) Work out $2a + b : b$, giving your answer in the simplest form.
(iii) Work out $7a - 5b : 4a$, giving your answer in the simplest form.

8 $m : n = 3 : 8$ and r is 20% of n .

Work out $m : r$.