



## Year 10 Mathematics Equations Revision 1

1 Solve these one step equations

a)  $m + 17 = 28$

b)  $n - 12 = 10$

c)  $3p = 7$

d)  $\frac{m}{4} = 6$

2 Solve these two step equations

a)  $3m + 5 = 7$

b)  $\frac{a+3}{5} = 3$

c)  $10 - 3m = 25$

d)  $\frac{p}{3} - 6 = 15$

3 Solve

a)  $3a + 5 = 2a + 7$

b)  $5m - 3 = 2m + 9$

c)  $2 - 2x = 8 + x$

4 Expand the grouping symbols and then solve the equations

a)  $2(a + 4) = 10$

b)  $5(m - 3) = 3$

c)  $3(2m - 4) = 4m - 6$

5 Expand the grouping symbols and then solve the equations

a)  $3(m + 7) = 4(m - 2)$

b)  $3(x + 4) + 2(x - 5) = 4$

6 If  $P = 2L + 2B$  find  $P$  if  $L = 4$  and  $B = 3$

7 If  $v = u + at$  find  $v$  if  $u = 1.2$   $a = 0.5$  and  $t = 12.6$

8 If  $y = 3x - 2$  find  $x$  if  $y = 10$

9 If  $A = \frac{a+b}{2}$  find  $a$  if  $A = 7$  and  $b = 10$

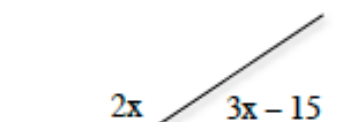
10 The product of a certain number and 6 is 72. What is the number?

11 If a number is multiplied by 6 and 7 is subtracted from the product, the answer is 23. What is the number?

12 The sum of three consecutive integers is 30. What are the integers?

13 A rectangle is twice as long as it is wide. If the perimeter is 144 cm, what are the dimensions?

14 Find the value of  $x$  in this diagram



# ANSWERS

Question 1

a)  $m = 11$

b)  $n = 22$

c)  $p = 2\frac{1}{3}$

d)  $m = 24$

Question 2

a)  $m = \frac{2}{3}$

b)  $a = 12$

c)  $m = -5$

d)  $p = 63$

Question 3

a)  $a = 2$

b)  $m = 4$

c)  $x = -2$

Question 4

a)  $a = 1$

b)  $m = 3\frac{3}{5}$

c)  $3$