



Year 8 Mathematics

Equations Practice Test 1

Name _____

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

