

Master Maths 9 Worksheet 29

Substitution

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Name: _____

1. $F = ma$
Find F if $m = 12$ and $a = 6$.

2. $v = u + at$
Find v if $u = 6$, $a = 2$ and $t = 3$.

3. $s = ut + \frac{1}{2}at^2$
Find s if $u = 3$, $t = 2$ and $a = 4$.

4. $F = \frac{10m}{x^2}$
Find F if $m = 20$ and $x = 2$.

5. $p = q^2 - r^2$
Find p if $q = 6$ and $r = 3$.

6. $z = \sqrt{b^2 - 4ac}$
Find z if $b = 8$, $a = 2$ and $c = 6$.

7. $s = \frac{1}{2}(a + b)$
Find a if $s = 20$ and $b = 10$.

8. $p = q - r$
Find q if $p = 3.5$ and $r = 2.1$.

9. $x^2 = y^2 + z^2$
Find y if $x = 13$ and $z = 5$.

10. $P = I^2R$
Find R if $P = 10$ and $I = 2$.

11. $E = \frac{1}{2}mv^2$
Find v if $E = 10$ and $m = 5$.