



Strand: Algebra

Substrand: Understand Symbols

## Solving problems by substitution

If  $x = 2$  and  $y = 5$  then what does the following expression equal ?  $8x + 3y$

eg

$$8x + 3y$$

substitute  $x=2$  and  $y = 5$ 

$$= 8 \times 2 + 3 \times 5$$

$$= 16 + 15$$

$$= 31$$

Solve these problems using the setting out above

1	If $f = 3$ and $g = 2$ then what does the following expression equal ?	$8f + 5g$
2	If $l = 8$ and $m = 5$ then what does the following expression equal ?	$7l + 6m$
3	If $y = 3$ and $z = 7$ then what does the following expression equal ?	$3y + 3z$
4	If $c = 2$ and $d = 8$ then what does the following expression equal ?	$5c + 7d$
5	If $c = 3$ and $d = 5$ then what does the following expression equal ?	$4c + 7d$
6	If $f = 8$ and $g = 7$ then what does the following expression equal ?	$6f + 9g$
7	If $v = 8$ and $w = 2$ then what does the following expression equal ?	$4v + 7w$
8	If $e = 6$ and $f = 4$ then what does the following expression equal ?	$2e + 4f$
9	If $i = 2$ and $j = 7$ then what does the following expression equal ?	$7i + 6j$
10	If $s = 1$ and $t = 1$ then what does the following expression equal ?	$5s + 2t$
11	If $q = 4$ and $r = 8$ then what does the following expression equal ?	$8q + 3r$
12	If $a = 6$ and $b = 5$ then what does the following expression equal ?	$9a + 7b$
13	If $x = 6$ and $y = 7$ then what does the following expression equal ?	$8x + 8y$
14	If $g = 5$ and $h = 6$ then what does the following expression equal ?	$7g + 8h$
15	If $m = 1$ and $n = 4$ then what does the following expression equal ?	$9m + 7n$
16	If $f = 1$ and $g = 7$ then what does the following expression equal ?	$6f + 3g$
17	If $y = 6$ and $z = 4$ then what does the following expression equal ?	$4y + 5z$
18	If $b = 5$ and $c = 6$ then what does the following expression equal ?	$8b + 7c$
19	If $m = 1$ and $n = 2$ then what does the following expression equal ?	$4m + 2n$
20	If $x = 5$ and $y = 1$ then what does the following expression equal ?	$3x + 2y$
21	If $g = 8$ and $h = 3$ then what does the following expression equal ?	$9g + 6h$
22	If $x = 1$ and $y = 1$ then what does the following expression equal ?	$9x + 3y$
23	If $a = 3$ and $b = 1$ then what does the following expression equal ?	$5a + 7b$
24	If $d = 5$ and $e = 1$ then what does the following expression equal ?	$2d + 9e$
25	If $k = 7$ and $l = 2$ then what does the following expression equal ?	$7k + 2l$

**Reflection**

What did you do well in this activity?

What could you have improved?

What new things have you learnt?