



Algebra

Substitution

9a. Match the children's calculations to their correct answers if $a = 1.25$, $b = 100$ and $c = 9$.



Jack

$$(3a \times b) - c$$

375



Ivy

$$(3a \times b) + c$$

366

384



VF

9b. Match the children's calculations to their correct answers if $a = 0.2$, $b = 25$ and $c = 10$.



Will

$$5a \times (3b - c)$$

65



Lucy

$$5a \times (3b + c)$$

85

75



VF

10a. Circle the correct answer.

If $c = 5.1$, $d = 0.5$ and $e = 5$,
 $(3c + 2d) - 4e = ?$

3.7

-2.7

-3.7



VF

10b. Circle the correct answer.

If $c = \frac{1}{12}$, $d = 100$ and $e = 7.9$,
 $(12c \div d) + e = ?$

7.91

8.75

2.5



VF

11a. Tick the substitution used for this expression if the value is 54.6.

$$(a \div c) + 5b$$

A. $a = 2.5$, $b = 10$, $c = 2$

B. $a = 2.3$, $b = 10$, $c = 0.5$

C. $a = 2.4$, $b = 10$, $c = 1$



VF

11b. Tick the substitution used for this expression if the value is 176.

$$(a - 5b) \times c$$

A. $a = 25$, $b = 0.6$, $c = 8$

B. $a = 30$, $b = 0.8$, $c = 9$

C. $a = 25$, $b = 0.8$, $c = 6$



VF

12a. Complete the calculations using the values below:

★ = 0.25 and ▲ = 0.5

A. $(8 \text{ ▲} \div 10) - \text{★}$

B. $(4 \text{ ▲} + 2 \text{ ★}) + \text{★}$

C. $10 \text{ ★} + 10 \text{ ▲} + \text{▲}$



VF

12b. Complete the calculations using the values below:

★ = -2 and ▲ = 8

A. $(6 \text{ ★} + 2 \text{ ▲}) + \text{▲}$

B. $(5 \text{ ★} + 10 \text{ ▲}) + \text{▲}$

C. $4 \text{ ★} + 10 \text{ ▲} \div \text{▲}$



VF

7. Work out the values of the expressions by substituting the following.

$$u = -4 \qquad v = 0.2 \qquad w = 2\frac{1}{4}$$

A. $6u + 5v = \square$

C. $w \div 10v = \square$

B. $2w - v = \square$

D. $4w - u = \square$



VF
HW/Ext

8. Find the odd one out that gives an answer < 9 .

$$l = 8.25 \qquad m = -5 \qquad n = \frac{3}{4}$$

A. $n + 8.5 = \square$

B. $3l + 2m = \square$

C. $2l - 12n = \square$



VF
HW/Ext

9. For each of the statements below say whether you agree or disagree.

A. The value -6 solves the equation $14 + 2w = 2$

B. The value $2\frac{1}{2}$ solves the equation $12 - 4y = 3$

Explain your reasoning.



RPS
HW/Ext