Week 15

Friday 3rd July 2020

Year 6 Finding Pairs of values - Varied Fluency

Watch the demonstration on finding pairs of values:
https://www.youtube.com/watch?v=O-bQyDTtPz4

Substitution

1a. Match the expressions to their values.

If  = 2 and  = 10.

A.	 + 	8
B.	 – 	20
C.	 x 	4

Substitution

1b. Match the expressions to their values.

If  = 5 and  = 25.

A.	 – 	20
B.	 + 	30
C.	 + 	50

2a. True or false?

If a = 10 and b = 5.

2a + b = 22

2b. True or false?

If a = 7 and b = 15.

2b – 2a = 16

3a. Tick the substitution used for this expression if the value is 225.

a + 2b

a = 100, b = 25 ☐

a = 25, b = 100 ☐

3b. Tick the substitution used for this expression if the value is 100.

a – 2b

a = 200, b = 50 ☐

a = 50, b = 200 ☐

4a. Who is correct?

a = 20, b = 4

Mo

(a + b) x 10
is 26 x 10 = 260

Millie

(a – b) x 10
is 16 x 10 = 160

4b. Who is correct?

a = 5, b = 100

Euan

b – 2a
is 100 – 5 = 95

Mia

b – 2a
is 100 – 10 = 90

Substitution

5a. Match the expressions to their values.

If ★ = 5 and ● = 2.

A. ★ + ★ − ●

B. ● + ★ + ●

C. ★ + ★ + ★

15

8

9

6 VF

Substitution

5b. Match the expressions to their values.

If ◆ = 0.5 and ☾ = 8.

A. (◆ x ☾) − ◆

B. ◆ + ◆ + ☾

C. ☾ − ◆ + ☾

3.5

15.5

9

6 VF

6a. True or false?

If x = 10, y = 2 and z = 5.

$3x + y + z = 37$

6 VF

6b. True or false?

If $x = \frac{1}{3}$, y = 1 and z = 10.

$(6x - y) + z = 27$

6 VF

7a. Tick the substitution used for this expression if the value is 75.

r x (p x q)

p = 10, q = 2.5, r = 3 ☐

p = 10, q = 3, r = 2 ☐

6 VF

7b. Tick the substitution used for this expression if the value is 93.

4q – r

q = 25, r = 7 ☐

q = 30, r = 25 ☐

6 VF

8a. Who is correct?

a = 12 and b = 6

Jacob: a x b is 12 x 6 = 72

Lily: a x b is 12 x 4 = 48

6 VF

8b. Who is correct?

a = 0.5, b = 10 and c = 9

Tobias: 2a x (b x c) is 1 x 90 = 90

Hafsa: 2a x (b x c) is 10 x 90 = 900

6 VF

Substitution

9a. Match the expressions to their values.

If ▲ = 0.25 and ✦ = 0.5.

A. (8 ▲ ÷ 10 ✦) − ✦ — 4

B. (4 ▲ + 2 ✦) ÷ ✦ — 7.75

C. 10 ✦ + 10 ▲ + ▲ — - 0.1

6 VF

Substitution

9b. Match the expressions to their values.

If ★ = $\frac{1}{6}$ and ◣ = 2.7.

A. (12 ★ + 2 ◣) − ◣ — 4.7

B. (6 ★ + 10 ◣) + ◣ — 33.7

C. 24 ★ + 10 ◣ + ◣ — 29.7

6 VF

10a. True or false?

If c = 5.1, d = 0.5 and e = 5.

$(3c + 2d) - 4e = 3.7$

6 VF

10b. True or false?

If c = $\frac{1}{12}$, d = 100 and e = 7.9.

$(12c \div d) + e = 7.91$

6 VF

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

(a ÷ c) + 5b

a = 2.5, b = 10, c = 2 ☐

a = 2.3, b = 10, c = 0.5 ☐

6 VF

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

(a − 5b) x c

a = 25, b = 0.6, c = 8 ☐

a = 30, b = 0.8, c = 9 ☐

6 VF

12a. Who is correct?

a = 1.25, b = 100 and c = 9

Jack: (3a x b) − c is 375 − 9 = 366

Ivy: (3a x b) − c is 125 − 9 = 116

6 VF

12b. Who is correct?

a = 0.2, b = 25 and c = 10

Will: 5a x (3b − c) is 2 x 15 = 30

Lucy: 5a x (3b − c) is 1 x 65 = 65

6 VF