Week 15

Wednesday 1st July 2020

Year 5 Use an Algebraic Rule - Varied Fluency
Review how to solve an Algebraic expression when given the value of the variable using the link:
https://www.youtube.com/watch?v=DOKiZfX9ePk

*As Algebra is mainly a year 6 objective, you only need to complete **D** and **E**

Use An Algebraic Rule

1a. Calculate the output for the following rules where $a = 12$.

$(a + 10) \times 2$

$2a - 4$

$(a - 3) \times 2$

Use An Algebraic Rule

1b. Calculate the output for the following rules where $a = 7$.

$(2a + a) - 2$

$(56 + 10) - a$

$35 + a$

2a. Match the output to the correct expression, where $a = 10$.

$45 - 2a$	62
$(a + 5) \times 2$	25
$72 - a$	30

2b. Match the output to the correct expression, where $a = 2$.

$9 + (a - 1)$	10
$100 - 2a$	14
$(a + 5) \times 2$	96

3a. True or false?

$$11 \rightarrow 2a + (15 - a) \rightarrow 26$$

3b. True or false?

$$15 \rightarrow (50 - a) - 10 \rightarrow 40$$
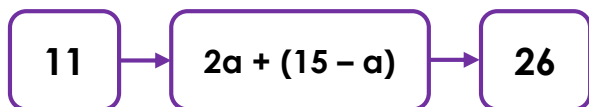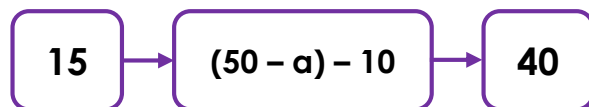
4a. Toby is using the expression $5 + 2a$.

Calculate the value of a when his outputs are;

$5 + 2a$

$\rightarrow$ 17

$\rightarrow$ 27

$\rightarrow$ 11

4b. Tim is using the expression $(a - 2) \times 2$.

Calculate the value of a when his outputs are;

$(a - 2) \times 2$

$\rightarrow$ 16

$\rightarrow$ 24

$\rightarrow$ 10

Use An Algebraic Rule

Use An Algebraic Rule

5a. Calculate the output for the following rules where a = 5.

$$2a + 5$$

$$(a + 3) \div 4$$

$$4a - 15$$

5b. Calculate the output for the following rules where a = 9.

$$a^2 - 7$$

$$(10a - 6) \div 2$$

$$12 + 3a$$

6a. Match the output to the correct expression, where a = 10.

$3a - 5$	3
$(a - 4) \div 2$	23
$2a + 3$	25

6b. Match the output to the correct expression, where a = 7.

$25 + 5a$	18
$(a \div 7) + 8$	9
$(a - 4) \times 6$	60

7a. True or false?

$$12 \rightarrow (a - 8) \times 10 \rightarrow 40$$

7b. True or false?

$$5 \rightarrow a^2 - 10 \rightarrow 0$$
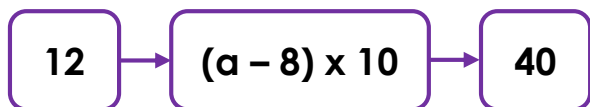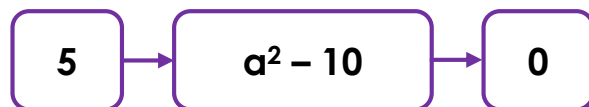
8a. Ivy is using the expression $(a - 1) \div 3$.

Calculate the value of a when her outputs are;

$$(a - 1) \div 3$$

	3
	5
	10

8b. Jo is using the expression $8a - (a \div 2)$.

Calculate the value of a when her outputs are;

$$8a - (a \div 2)$$

	75
	90
	30