Week 14

Thursday 25th June 2020

Year 6 One-Step Algebraic rules - Varied Fluency

Find a Rule – One Step

Find a Rule – One Step

1a. Match the function to its equivalent algebraic rule.

Add 5 to x	$2x$
Subtract 10 from x	$x - 10$
5 less than x	$x + 5$
Multiply x by 2	$x - 5$

1b. Match the function to its equivalent algebraic rule.

Double y	$y + 3$
2 more than y	$y + 2$
3 more than y	$y - 3$
Subtract 3 from y	$2y$

2a. Circle the function being used here.

10		20
4	?	14
23		33

$2a$ $a + 10$ $10a$

2b. Circle the function being used here.

14		7
8	?	1
10		3

$b - 7$ $b + 7$ $2b$

3a. Work out the missing inputs and outputs for this function machine.

16		?
a	$- 9$	?
?		21

3b. Work out the missing inputs and outputs for this function machine.

x		?
?	$\times 2$	16
5		?

4a. Match the equation to its answer if $b = 5$.

$2b$	10
$b + 4$	3
$17 - b$	9
$b - 2$	12

4b. Match the equation to its answer if $v = 7$.

$15 + v$	3
$v + 1$	22
$10 - v$	8
$2v$	14

Find a Rule – One Step

5a. Match the function to its equivalent algebraic rule.

Add 2.5 to x	$9x$
Double x	$x \div 9$
Multiply x by 9	$2x$
9 times smaller than x	$x + 2.5$

5b. Match the function to its equivalent algebraic rule.

2 less than y	$5 + y$
Multiply y by 5	$5y$
Add 5 to y	$y \div 2$
Halve y	$y - 2$

6a. Circle the function being used here.

6		18
4.2	?	12.6
3.5		10.5

$4a$ $a + 12$ $3a$

6b. Circle the function being used here.

5.2		4.8
6	?	4
8.6		1.4

$10 - b$ $b - 2$ $b - 10$

7a. Work out the missing inputs and outputs for this function machine.

28		?
?	÷ 4	6
a		?

7b. Work out the missing inputs and outputs for this function machine.

3.6		?
11	+ 2.4	?
?		x

8a. Match the equation to its answer if $y = 15$.

$2y$	3
$4.4 + y$	19.4
$y - 12$	7.5
$y \div 2$	30

8b. Match the equation to its answer if $t = 10.6$.

$t \div 2$	13
$t + 2.4$	4.4
$15 - t$	5.6
$t - 5$	5.3

Find a Rule – One Step

Find a Rule – One Step

9a. Match the function to its equivalent algebraic rule.

10 times smaller than x	$10 + x$
10 more than x	$0.25x$
10 less than x	$\frac{x}{10}$
A quarter of x	$x - 10$

9b. Match the function to its equivalent algebraic rule.

5 more than y	$y - 5$
Half of y	y^2
5 less than y	$y + 5$
y times y	$0.5y$

10a. Circle the function being used here.

6.5		-10.5
9	?	-3
13		6

$a - 17$ $\quad$ $a - 30$ $\quad$ $3a - 30$

10b. Circle the function being used here.

15		-10.5
18	?	-9
14.5		-10.75

$r - 18.5$ $\quad$ $2r - 18$ $\quad$ $0.5r - 18$

11a. Work out the missing inputs and outputs for this function machine.

?		x
10.5	$\div 5$	?
a		?

11b. Work out the missing inputs and outputs for this function machine.

m		?
?	$- 26$	-2.4
?		-0.8

12a. Match the equation to its answer if $v = 9.9$

$2v$	19.8
$2.8 - v$	5.4
$\frac{v}{3}$	3.3
$-4.5 + v$	-7.1

12b. Match the equation to its answer if $c = 4.8$.

$c - 5.3$	19.2
$-7.9 + c$	2.4
$4c$	-0.5
$\frac{c}{2}$	-3.1