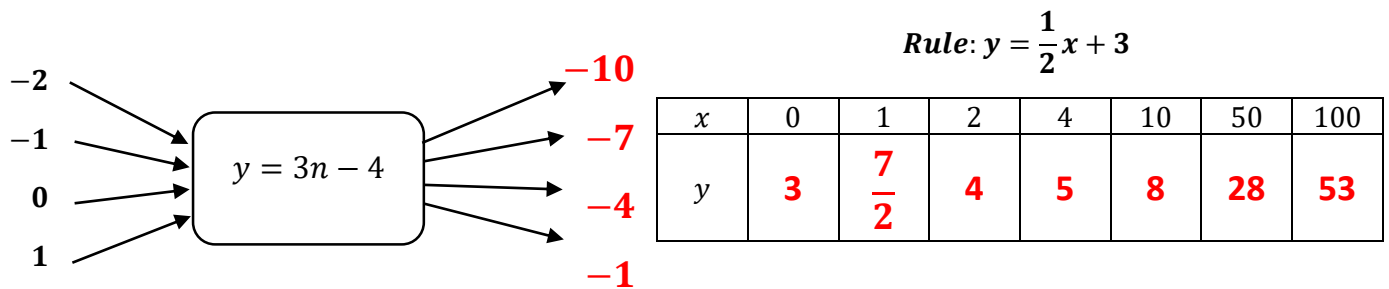


FUNCTIONS & TABLES – TOPIC 7

1. Flow Diagrams

Determine the output values for the following flow diagram and table:



2. Describing Relationships in Tables

Find the formula/rule for each of the given tables below:

a.

x	0	1	2	3	4
y	3	5	7	9	11

$$y = 2x + 3$$

b.

x	5	6	7	8	9
y	-9	-11	-13	-15	-17

$$y = -2x + 1$$

c.

x	0	1	2	3	4
y	1	5	9	13	17

$$y = 4x + 1$$

3. Use the table to determine the value of m and n .

a.

x	-2	-1	0	1	2		12		n
y	3	5	7	9	11		m		52

RULE: $y = 2x + 7$

m

Subs (12; m)

$$y = 2x + 7$$

$$(m) = 2(12) + 7$$

$$m = 31$$

n

Subs (n ; 52)

$$y = 2x + 7$$

$$(52) = 2(n) + 7$$

$$n = \frac{45}{2}$$

b.

x	1	2	3	4	5		12		n
y	6	10	14	18	22		<i>m</i>		82

RULE: $y = 4x + 2$

m

Subs (12; *m*)

$$y = 4x + 2$$

$$(m) = 4(12) + 2$$

$$m = 50$$

n

Subs (*n*; 82)

$$y = 4x + 2$$

$$(82) = 4(n) + 2$$

$$n = 20$$

c.

x	-1	0	1	2	3		11		n
y	-9	-4	1	6	11		<i>m</i>		141

RULE: $y = 5x - 4$

m

Subs (11; *m*)

$$y = 5x - 4$$

$$(m) = 5(11) - 4$$

$$m = 51$$

n

Subs (*n*; 141)

$$y = 5x - 4$$

$$(141) = 5(n) - 4$$

$$n = 29$$

d.

x	-4	-3	-2	-1	0		17		n
y	12	10	8	6	4		<i>m</i>		-48

RULE: $y = -2x + 4$

m

Subs (17; *m*)

$$y = -2x + 4$$

$$(m) = -2(17) + 4$$

$$m = -30$$

n

Subs (*n*; -48)

$$y = -2x + 4$$

$$(-48) = -2(n) + 4$$

$$n = 26$$