

**GRADE 12 APPLIED  
REVIEW OF FUNCTIONS & RELATIONS  
FROM PRIOR STUDIES**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Evaluate the following mathematical expressions for the given value:

a.  $x + 5$ , if  $x = 3$

b.  $3x + 4$ ; given  $x = 7$

c.  $3t - 6$ ; given  $t = -5$

d.  $\frac{5}{8}t + \frac{3}{4}$ ; if  $t = 20$

2. Calculate the value of some amount  $y$  for these functions that perform some function on some value,  $x$ , to get another value,  $y$ .

$x$	Function ; $f(x)$	$y = f(x)$
5	$f(x) = 3x + 7$ eg: $f(5) = 3(5)+7 = 22$	<b><math>y = 22</math></b>
10	$f(x) = 3x + 7$	
15	$f(x) = 3x + 7$	
-3	$f(x) = 0.75x + 4.2$	
-1.2	$f(x) = 0.75x + 4.2$	
0	$f(x) = 0.75x + 4.2$	
2	$f(x) = 0.75x + 4.2$	
4	$f(x) = 0.75x + 4.2$	
9	$f(x) = \frac{2}{3}x+5$	
12	$f(x) = \frac{2}{3}x+5$	
$\frac{1}{2}$	$f(x) = \frac{2}{3}x+5$	
$-\frac{3}{8}$	$f(x) = \frac{2}{3}x+5$	

Manually plot and label the following random points on the (x, y) coordinate grid.

A(1, 7)

B(3, -5)

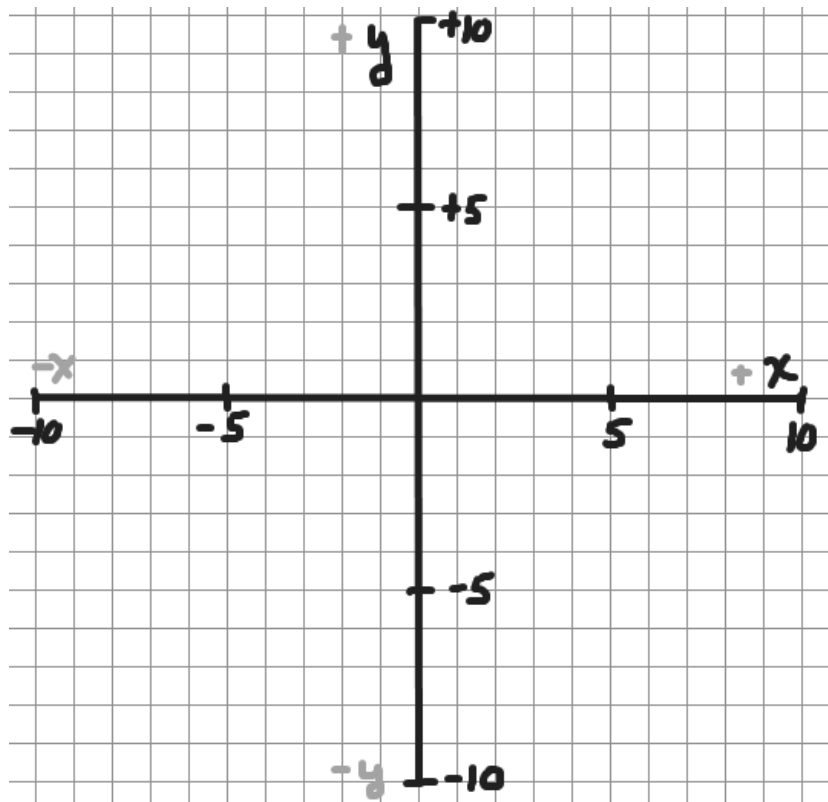
C(0, 0) 'Origin'

D(-4, 9)

E(-8, -5)

F(0, 7)

G(3, 0)



Graph the *linear* relationship from the function tables below:

a.

x	$y = 2x+3$
-4	
-1	
0	
1	
2	

b.

x	$y = -x - 2$
-4	
-1	
0	
1	
2	

