

TOPIC  
(SUB-TOPIC)

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

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

Practice Problems – 1

The tables show input and output values of functions similar to  $f(x) = ax$ , Write the corresponding function for each table.

0)

$x$	1	2	3	4	5
$f(x)$	3	6	9	12	15

$f(x) = 3x$

1)

$x$	54	42	24	18	72
$f(x)$	9	7	4	3	12

$f(x) = \underline{\hspace{2cm}}$

2)

$x$	2	4	8	16	32
$f(x)$	3	6	12	24	48

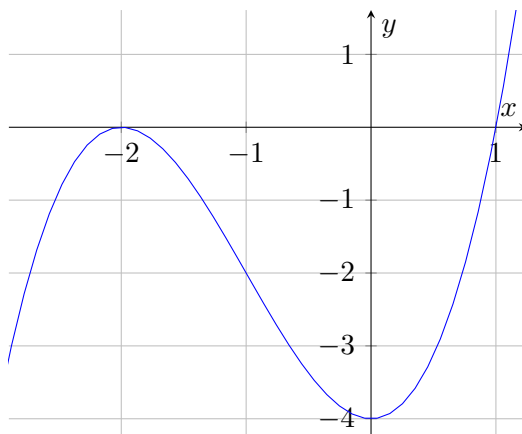
$f(x) = \underline{\hspace{2cm}}$

3)

$x$	8	5	12	11	102
$f(x)$	64	40	96	88	816

$f(x) = \underline{\hspace{2cm}}$

4) Identify the function for the given plot:



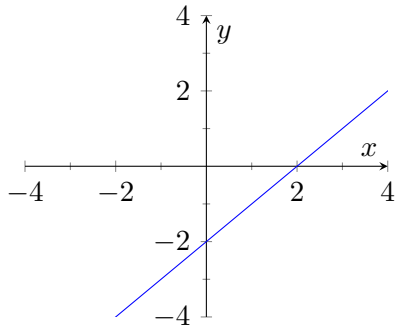
a)  $f(x) = x(x + 2)(x - 1)$  -

b)  $f(x) = (x - 1)(x + 2)^2$  -

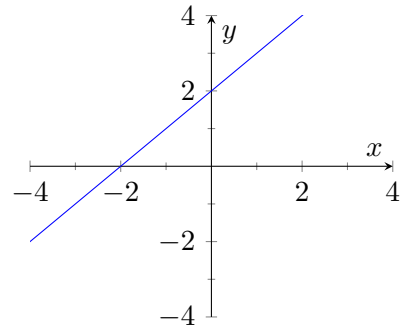
c)  $f(x) = x(x - 1)(x + 2)^2$  -

d)  $f(x) = (x - 1)^2(x + 1)^2$  -

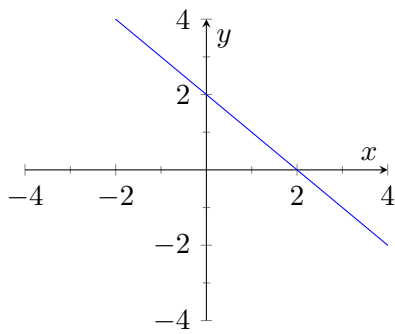
5) Identify the plot of  $y = x + 2$



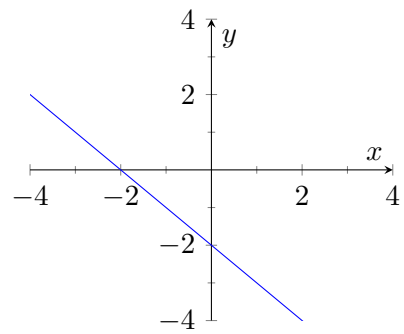
(a):



(b):

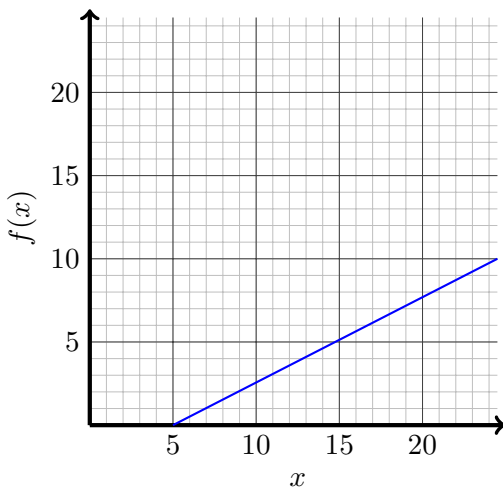


(c):

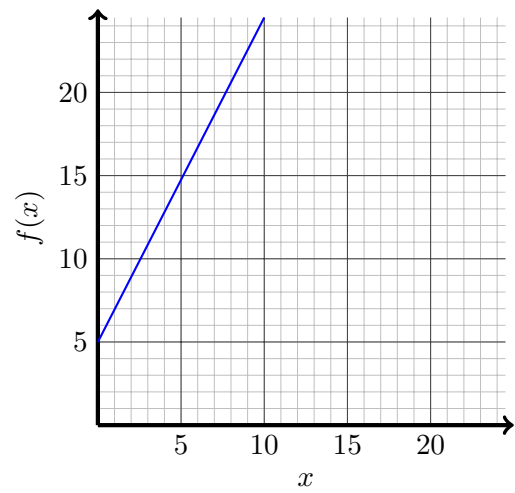


(d):

6) Which of the following two plots describes the function  $f(x) = 2x + 5$

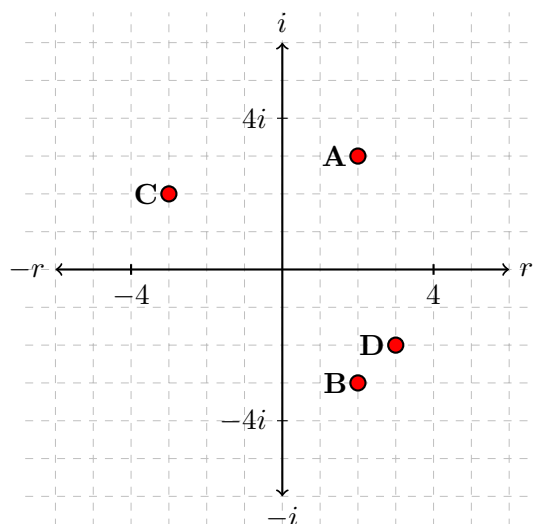


(a):



(b):

7) Write the complex numbers for all points given the figure.



A :  $2 + 3i$

B : \_\_\_\_\_

C : \_\_\_\_\_

D : \_\_\_\_\_

Complete the tables for each equation.

8)

$$f(x) = 2x^2 - 3$$

$x$	1	3	4	7	9	12
$f(x)$						

9)

$$9y = 3x$$

$x$			15	27		
$y$	3	15			6	12

10)

$$g(x) = \frac{1}{2}x + \frac{1}{2}x$$

$x$		12	17	8		
$g(x)$	1				9	12