

Section 4.4

Matching Equations with Graphs

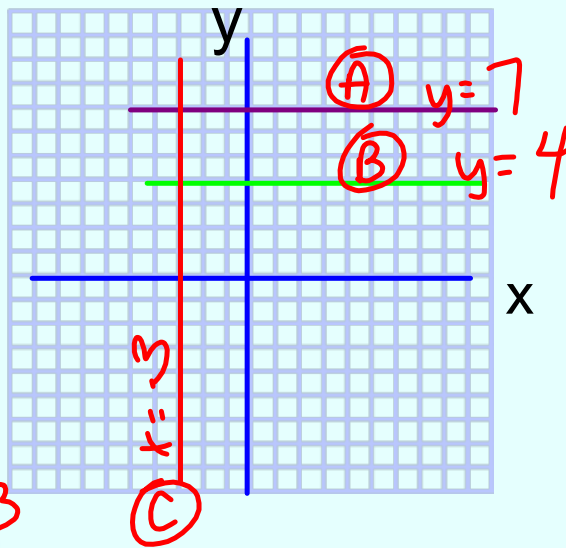
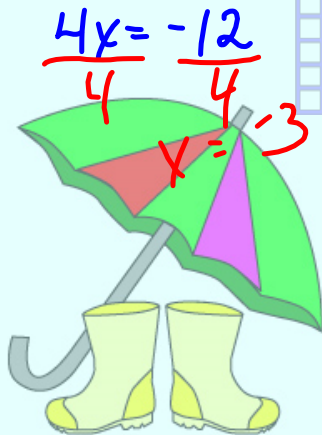


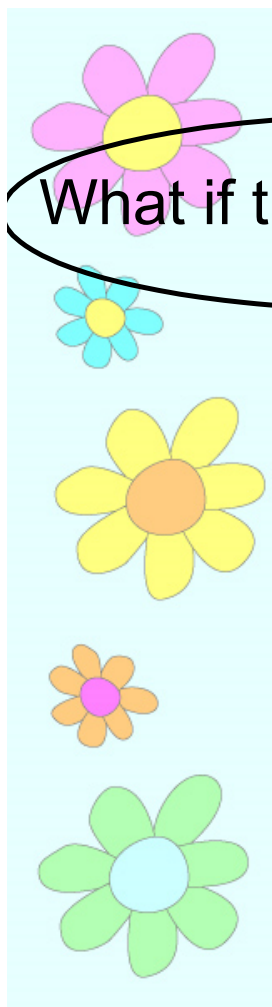
Can you match the equation with the graph???

A. $y=4$

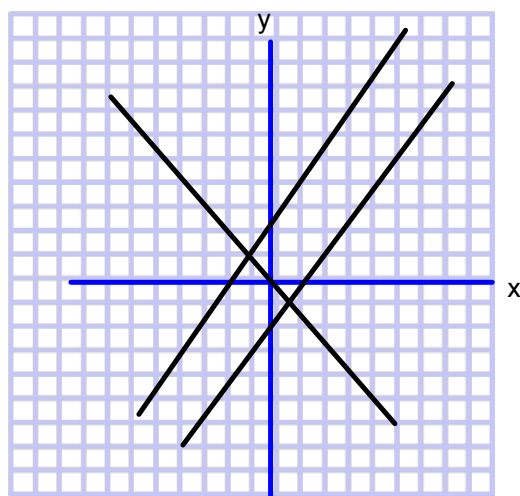
B. $y + 2 = 9$

C. $-12 = 4x$



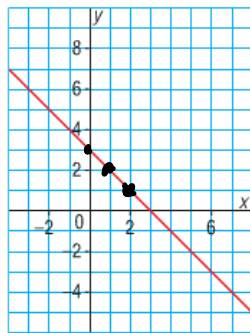


What if the line is oblique?

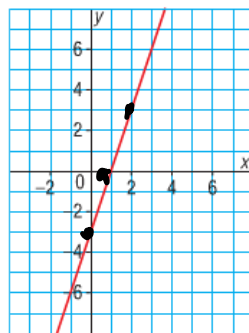


The 3 graphs below have these equations, but the graphs are not in order:
 $y = 3x + 3$ $x + y = 3$ $y = 3x - 3$

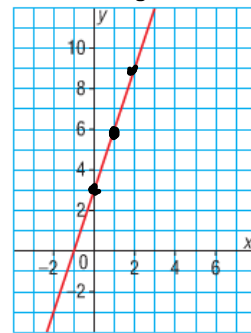
Graph A $x + y = 3$



Graph B $y = 3x - 3$



Graph C $y = 3x + 3$



$y = 3x + 3$

x	y
0	3
1	6

$x = 0$

$y = 3x + 3$
 $y = 3(0) + 3$
 $y = 3$

$x = 1$

$y = 3x + 3$
 $y = 3(1) + 3$
 $y = 6$

$x = 2$

$y = 3x + 3$
 $y = 3(2) + 3$
 $y = 6 + 3$
 $y = 9$

$x + y = 3$

x	y
0	3
1	2
2	1

$x = 1$
 $1 + y = 3$
 $y = 2$
 $x = 2$
 $2 + y = 3$
 $y = 1$

$y = 3x - 3$

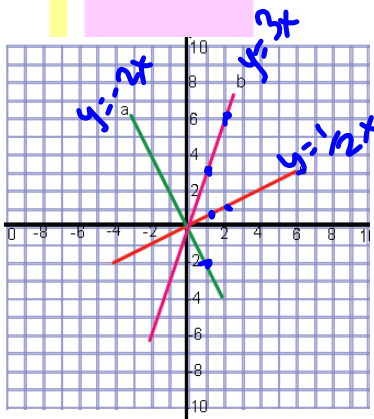
x	y
0	-3
1	0
2	3

$x = 0$
 $3(0) - 3 = y$
 $y = -3$

$x = 1$
 $3(1) - 3 = y$
 $3 - 3 = y$
 $0 = y$

$x = 2$
 $3(2) - 3 = y$
 $6 - 3 = y$
 $3 = y$

Use tables of value to try to find which equation matches which graph. $[x=0,1,2]$



C
i. $y = 1/2x$

x	y
0	0
1	0.5
2	1

A
ii) $y = -2x$

x	y
0	0
1	-2
2	-4

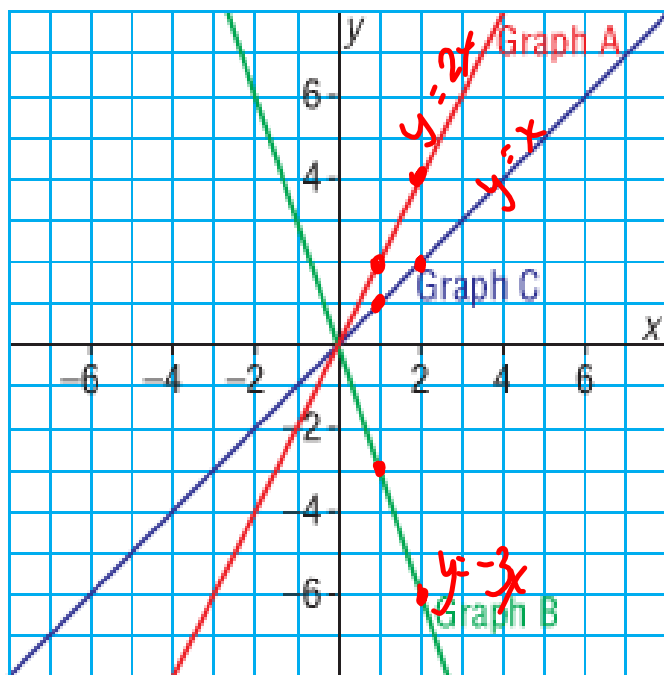
B
iii) $y = 3x$

x	y
0	0
1	3
2	6

$x=0$
 $y=3x$
 $y=3(0)$
 $y=0$

$x=1$ $y=3(1)$
 $y=3$

Match each graph on the grid with its equation below.



$$y = x$$

$$y = 2x$$

$$y = -3x$$

$y = x$ (C)

x	y
0	0
1	1
2	2

$y = 2x$ (A)

x	y
0	0
1	2
2	4

$y = -3x$ (B)

x	y
0	0
1	-3
2	-6



11. Which equation describes the graph below?

Justify your answer.

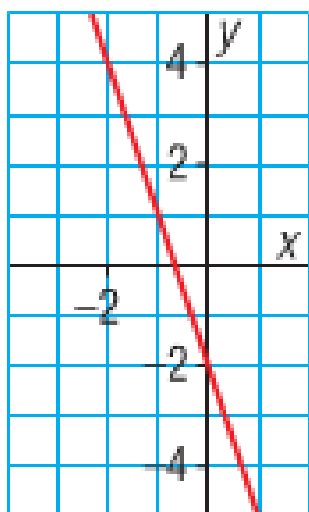
a) ~~$y = -2x + 3$~~

b) $y = 2x - 3$

c) $y = 3x - 2$

d) $y = -3x - 2$

Page 202
#11



a) $y = -2x + 3$

x	y
0	3
1	
2	

$x = 0$
 $y = 2(0) + 3$
 $y = 3$



Homework/Classwork

Page 188-189

3,4,5, 6, 8, 9

Use table of values/Show 2

Calculations!

5, 6, 8



3.

$$y = 2x$$

x	y
0	0
1	2
2	4

$$y = 4x$$

$$y = -x$$

