

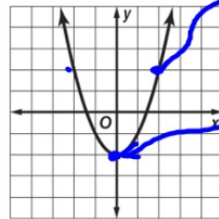
3-5) $-4 + 3 = -1$ ✓
 $2(-2) + 3(1) = -1$

3. Which systems of linear equations has a solution of $(-2, 1)$?

- A. $2x + 3y = -1$
 $x - y = -3$
- ~~B. $2x + 3y = 1$
 $x - y = 3$~~
- ~~C. $2x + 3y = -1$
 $x - y = 3$~~
- D. $2x + 3y = 1$
 $x - y = -3$

$(-2) - (1) = -3$ ✓
 $-2 - 1 = -3$
 $-3 = -3$ ✓

6. What is the equation of the quadratic function shown in the graph?



- F. $y = x^2 + 2$
- G. $y = x^2 - 2$
- H. $y = 2x^2$
- I. $y = \frac{1}{2}x^2$

$-2 = 0 - 2$

7. SHORT ANSWER Find the x- and y-intercepts of the linear equation below.

$4x - 5y = 20$

x-int: $4x - 5(0) = 20$
 $4x = 20$
 $x = 5$
 $(5, 0)$

y-int: $4(0) - 5y = 20$
 $-5y = 20$
 $y = -4$
 $(0, -4)$

9. What is the domain of the function shown in the table?

x	-4	-2	0	2	4
y	-3	7	5	0	-1

$y = mx + b$

10. A tank contains 550 gallons of water. When the valve is opened, the tank drains at a rate of 12 gallons per minute. Which function shows the relationship between the time t the valve is opened and the amount of water in the tank?

- F. $A(t) = -12t + 550$
- ~~G. $A(t) = 12t + 550$~~
- ~~H. $A(t) = 12 + 550t$~~
- ~~I. $A(t) = -12 + 550t$~~

11. Which relation is *not* a function?

A.

x	-2	0	2	4	6
y	3	3	3	3	3

B.

x	-3	0	2	-3	1
y	-5	4	2	0	-

C.

x	1	2	3	4	5
y	1	2	3	4	5

D.

x	-4	1	2	-3	4
y	0	3	-1	-2	3

All of them are functions

E. None of the above

8. What is the slope of the line that passes through $M(-6, 1)$ and $N(2, 5)$?

A. 2

B. $\frac{1}{2}$

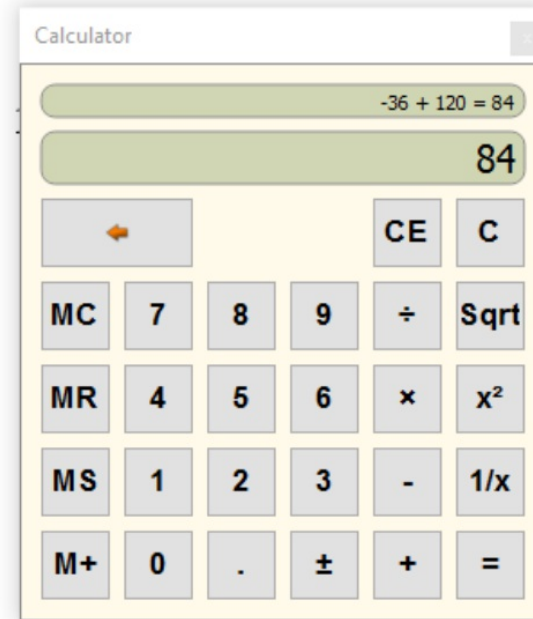
C. $-\frac{1}{2}$

$$= \frac{5-1}{2-(-6)} = \frac{4}{8} = \frac{1}{2}$$

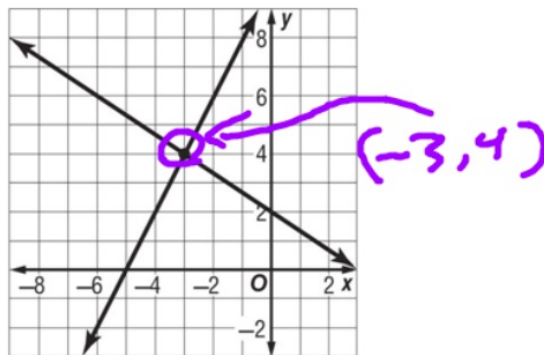
15. The quadratic function $h(t) = -16t^2 + 120$ represents the height of an object in feet t seconds after when it falls from a height of 120 feet. What is the height of the object after 1.5 seconds?

- A. 58 ft
- B. 84 ft**
- C. 92 ft
- D. 156 ft

$$\begin{aligned}
 h(1.5) &= 16(1.5)^2 + 120 \\
 &= -16(2.25) + 120 \\
 &= -36 + 120 \\
 &= 84
 \end{aligned}$$



12. What is the solution to the system of linear equations shown below?



19. Which of the following equations represents a horizontal line?

- F. $y = x$
- G. $y = -x + 1$
- H. $y = -12$**
- I. $x = 5$

