

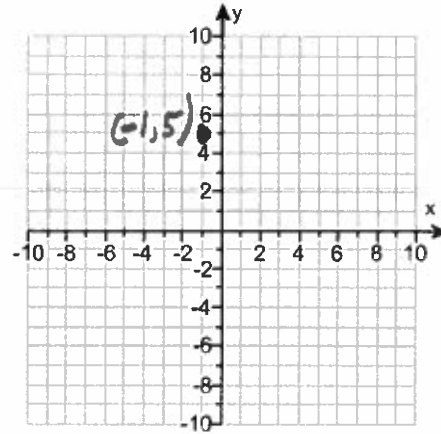
Student: _____
Date: _____

Instructor: Andreas Lazari
Course: Math1111-Summer2018

Assignment: Section 1.1 Homework

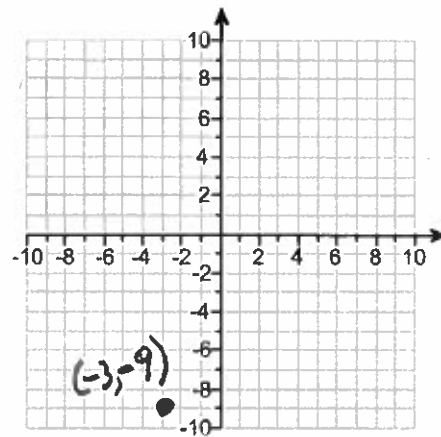
1. Plot the ordered pair $(-1, 5)$ on the rectangular coordinate plane.

Plot $(-1, 5)$.



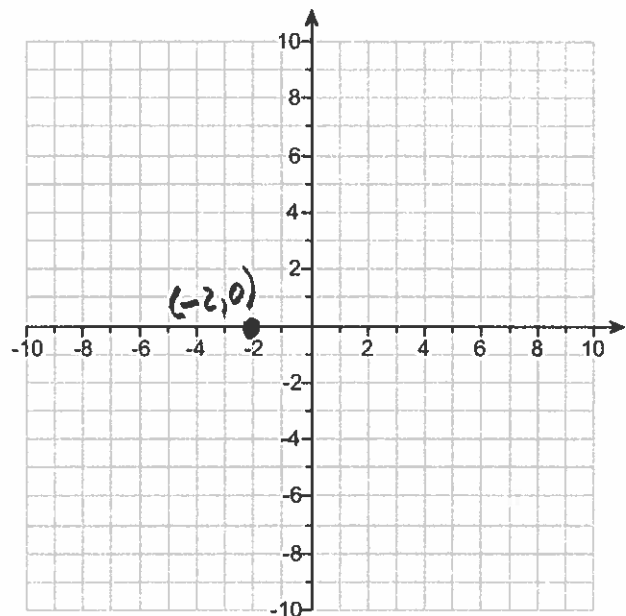
2. Plot the point $(-3, -9)$ in the rectangular coordinate system.

Plot $(-3, -9)$.



3. Plot the point $(-2, 0)$ in the rectangular coordinate system.

Plot $(-2, 0)$.



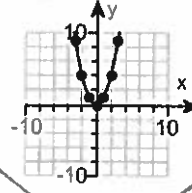
4. Find seven ordered pairs to the equation $y = x^2$. Then determine its graph.

x	y
-3	9
-2	4
-1	1
0	0
1	1
2	4
3	9

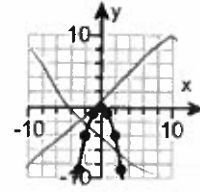
$$\begin{aligned} (-3)^2 &= 9 \\ (-2)^2 &= 4 \\ (-1)^2 &= 1 \\ (0)^2 &= 0 \\ (1)^2 &= 1 \\ (2)^2 &= 4 \\ (3)^2 &= 9 \end{aligned}$$

Choose the graph that connects the points.

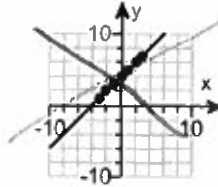
A.



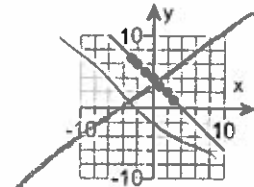
B.



C.



D.



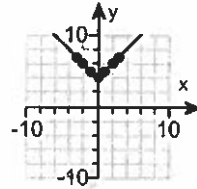
5. Graph the equation $y = |x| - 4$. Let $x = -3, -2, -1, 0, 1, 2,$ and 3 .

Find the following y-values. Then choose the correct graph of the equation to the right.

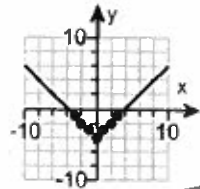
x	y
-3	-1
-2	-2
-1	-3
0	-4
1	-3
2	-2
3	-1

$$\begin{aligned} |-3| - 4 &= 3 - 4 = -1 \\ |-2| - 4 &= 2 - 4 = -2 \\ |-1| - 4 &= 1 - 4 = -3 \\ |0| - 4 &= 0 - 4 = -4 \\ |1| - 4 &= 1 - 4 = -3 \\ |2| - 4 &= 2 - 4 = -2 \\ |3| - 4 &= 3 - 4 = -1 \end{aligned}$$

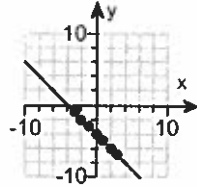
A.



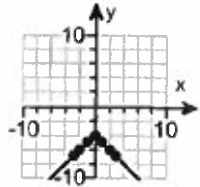
B.



C.



D.



6. Use the graph to the right to complete the following. For the graph, tick marks along the axes represent one unit each.

- a. Determine the x-intercepts, if any.
- b. Determine the y-intercepts, if any.

a. What is/are the x-intercept(s)? Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

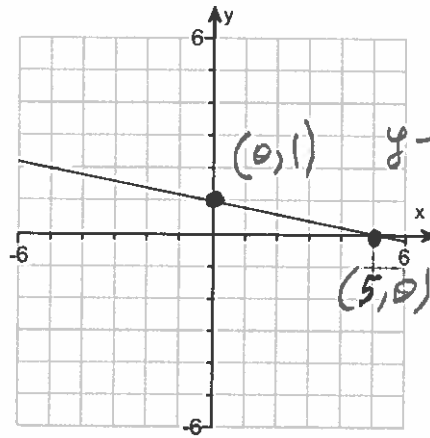
A. The x-intercept(s) is/are 5.
(Type an integer or a simplified fraction.
Use a comma to separate answers as needed.)

B. There is no x-intercept.

b. What is/are the y-intercept(s)? Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. The y-intercept(s) is/are 1.
(Type an integer or a simplified fraction.
Use a comma to separate answers as needed.)

B. There is no y-intercept.



7. Use the graph to the right to complete the following. For the graph, tick marks along the axes represent one unit each.

- a. Determine the x-intercepts, if any.
- b. Determine the y-intercepts, if any.

a. What is/are the x-intercept(s)? Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

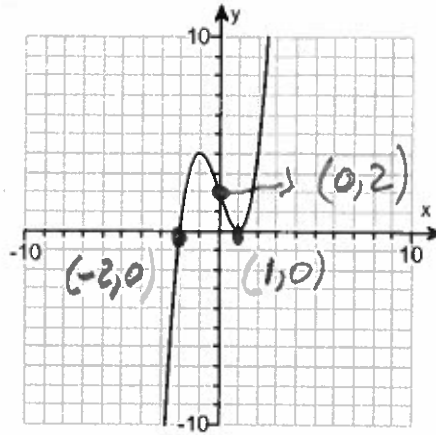
A. The x-intercept(s) is/are -2, 1.
(Type an integer or a simplified fraction.
Use a comma to separate answers as needed.)

B. There is no x-intercept.

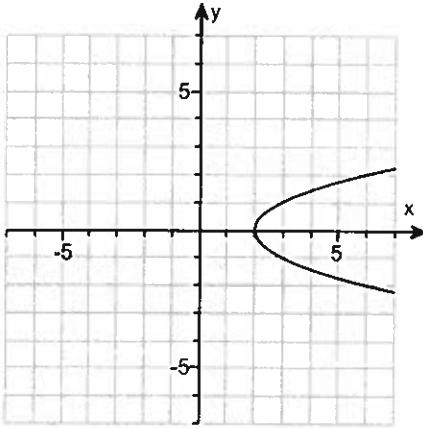
b. What is/are the y-intercept(s)? Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. The y-intercept(s) is/are 2.
(Type an integer or a simplified fraction.
Use a comma to separate answers as needed.)

B. There is no y-intercept.



8. Use the graph and a. determine the x-intercepts, if any; b. determine the y-intercepts, if any.



Type the x-intercept(s) in the box below. Select the correct choice below and fill in any answer boxes within your choice.

A. 2
(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)

B. There are no x-intercepts.

Type the y-intercept(s) in the box below. Select the correct choice below and fill in any answer boxes within your choice.

A. _____
(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)

B. There are no y-intercepts.

9. Write the English sentence as an equation in two variables. Then graph the equation.

The y-value is four increased by the square of the x-value.

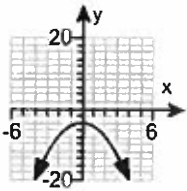
$\Rightarrow y = x^2 + 4$

Choose the equation that corresponds to the sentence above.

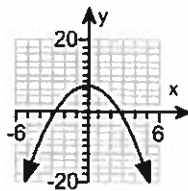
- A. $y = -x^2 + 4$
 B. $y = -x^2 - 4$
 C. $y = 4 - x^2$
 D. $y = 4 + x^2$

Choose the correct graph below.

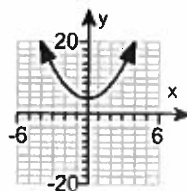
A.



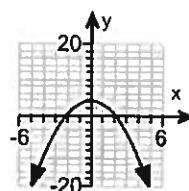
B.



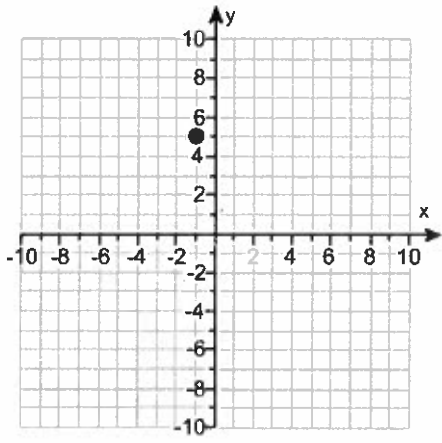
C.



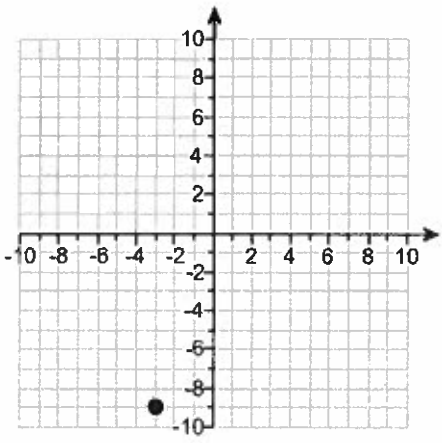
D.



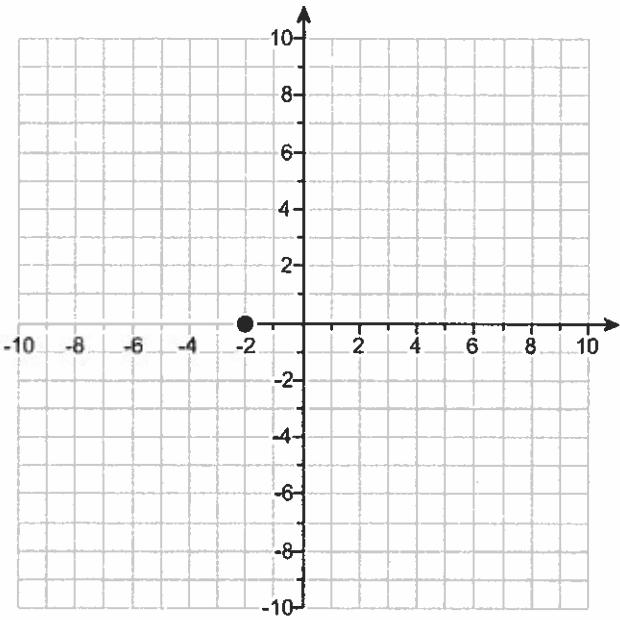
1.



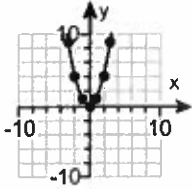
2.



3.

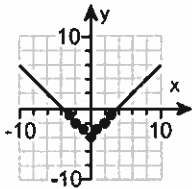


4. 9
4
1
0
1
4
9



A.

5. -1
-2
-3
-4
-3
-2
-1



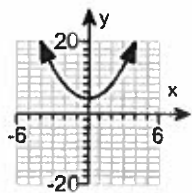
B.

6. A. The x-intercept(s) is/are 5.
(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)
A. The y-intercept(s) is/are 1.
(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)

7. A. The x-intercept(s) is/are 1, -2.
(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)
A. The y-intercept(s) is/are 2.
(Type an integer or a simplified fraction. Use a comma to separate answers as needed.)

8. A. 2 (Type an integer or a simplified fraction. Use a comma to separate answers as needed.)
B. There are no y-intercepts.

9. D. $y = 4 + x^2$



C.
