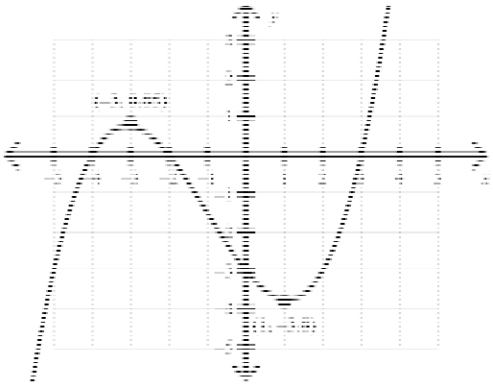
Name: _____ **Class:** _____ **Date:** _____ **ID: A**

Integrated Math 2 - Study Guide 1 - Baker

Use the graph below to do problems #1-3.



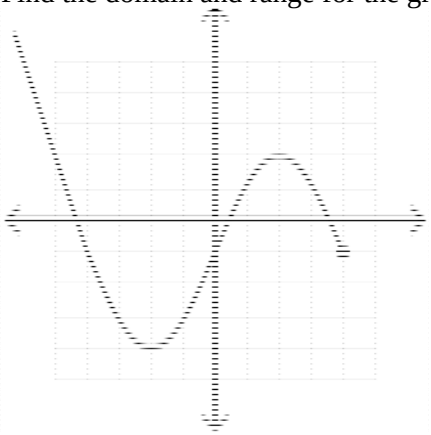
1. Name the x-intercept(s).

2. Name the y-intercept(s).

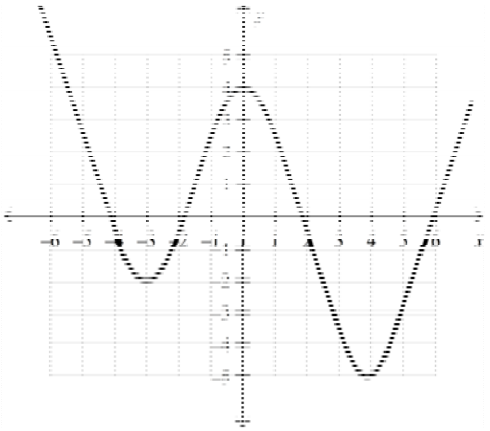
3. Write the interval(s) for which the graph is decreasing.

4. Write expressions for the end behaviors of this graph. (Use the infinity notation we used in class.)

5. Find the domain and range for the graph.



Use this graph to do problems #5-8.



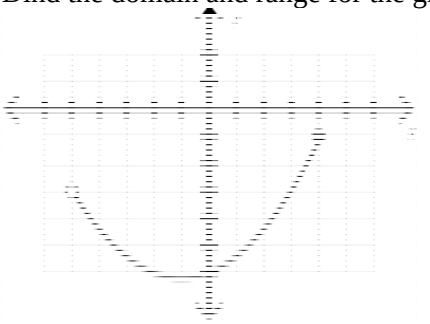
6. Write the realtive minimum(s) as ordered pairs. (*If the points aren't perfect, you can round to the nearest whole number.*)

7. Use out infinity notation to express the end behaviors of this graph.

8. On what interval(s) is this graph increasing?

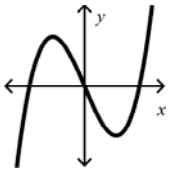
9. What are the domain and range for the relation {(2, -4), (3, 6), (4, 7), (-1, 6), (2, 3)}?

10. Dind the domain and range for the graph,

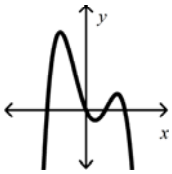


11. Which of these graphs have line symmetry? Select all that apply.

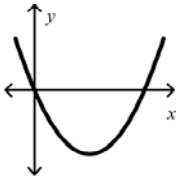
a.



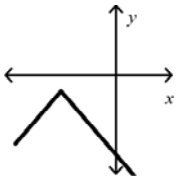
b.



c.

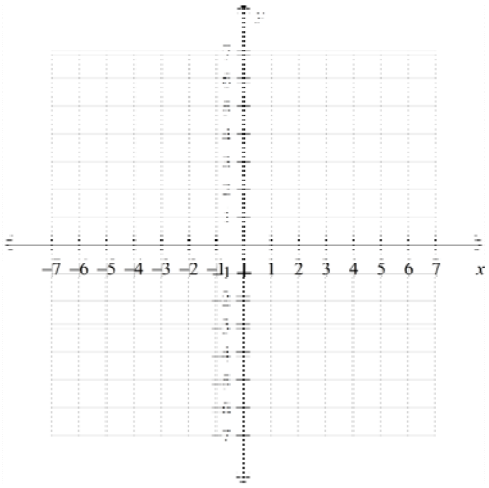


d.



12. Use the slope and *y*-intercept to graph the equation.

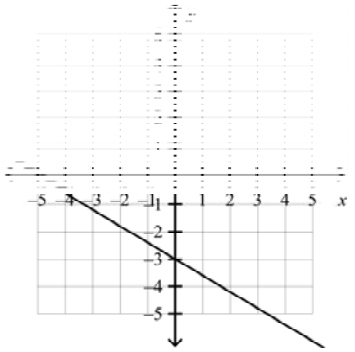
$y = \frac{3}{4}x - 3$



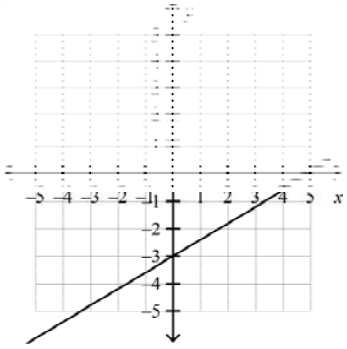
Match the equation with its graph.

13. $-3x + 5y = -15$

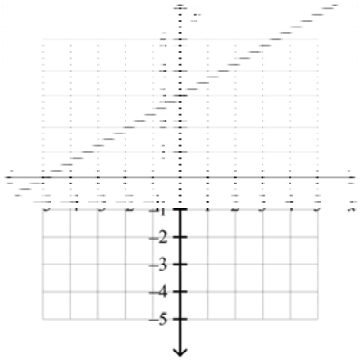
a.



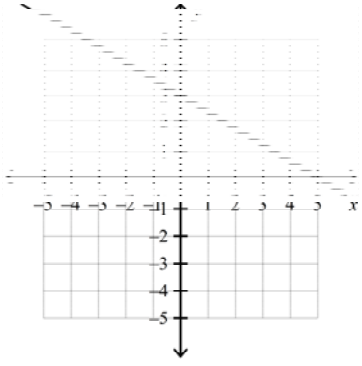
b.



c.



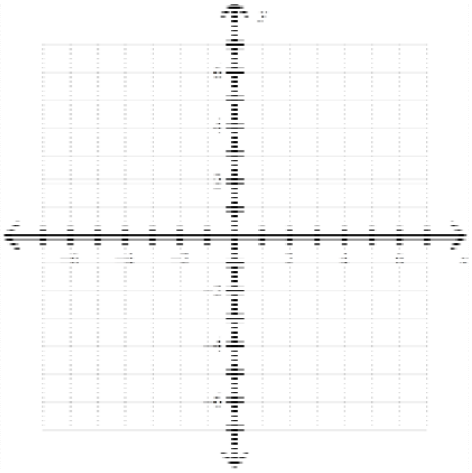
d.



Name: _____ **ID: A**

Find the *x*- and *y*-intercept of the line.

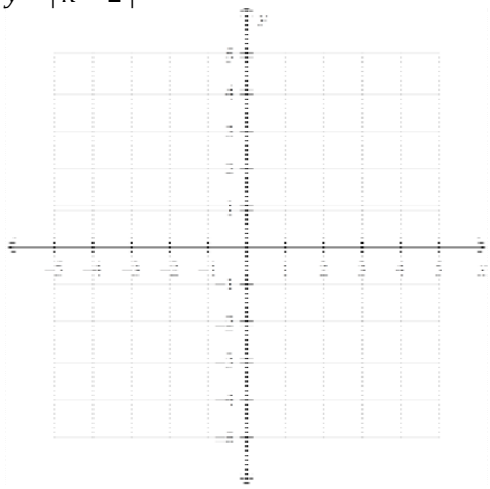
14. $6x - 2y = 30$ You may use this graph if it helps, but write the answers in the blanks below.



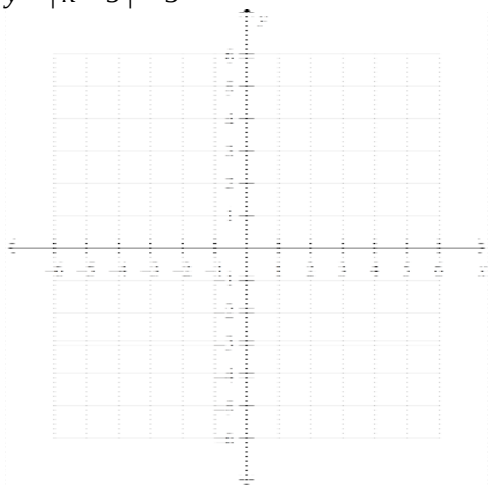
x-intercept: _____
y-intercept: _____

Graph each absolute value function.

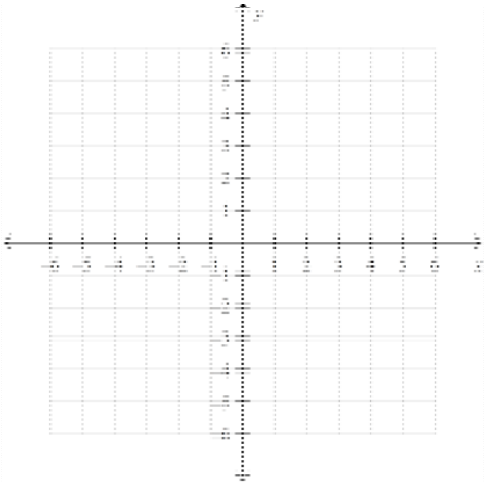
15. $y = |x + 2|$



16. $y = |x - 5| + 3$

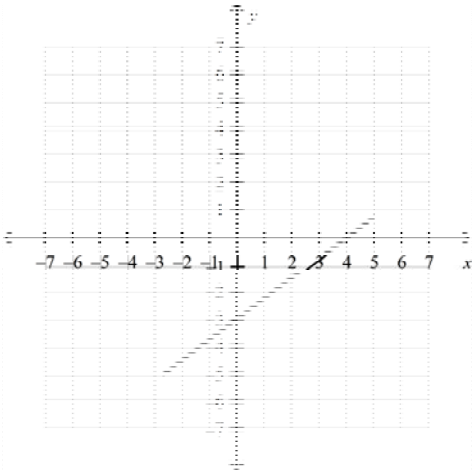


17. $y = -\frac{2}{3}|x + 2| - 3$

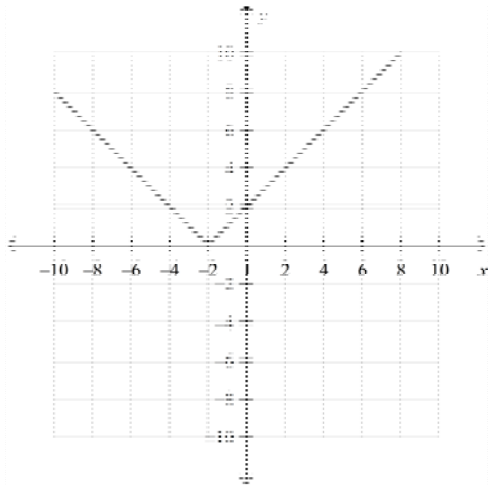


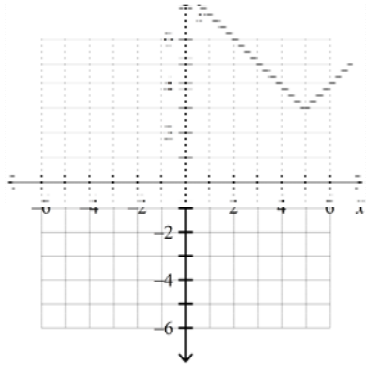
18. Look at the three graphs on **page 1** of this study guide. Which of the following statements are true? (Select all that apply.)
    a. None of these graphs have an absolute minimum.
    b. Only one of these graphs has an absolute minimum.
    c. Only one of these graphs DOESN'T have an absolute minumum.
    d. All of these graphs have absolute minimums.
    e. None of these graphs have an absolute maximum.
    f. Only one of these graphs has an absolute maximum.
    g. Only one of these graphs DOESN'T have an absolute maximum.
    h. All of these graphs have absolute maximums.

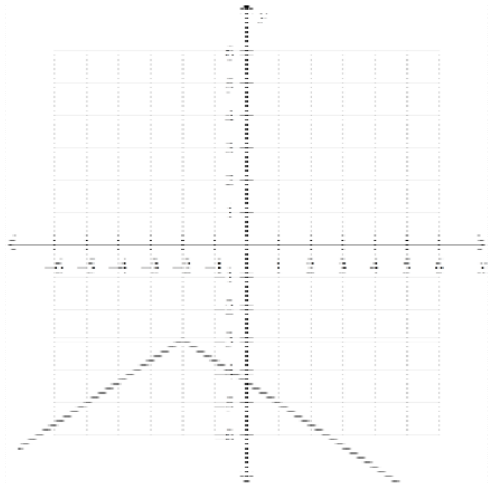
Integrated Math 2 - Study Guide 1 - Baker
Answer Section

1. -4, -2 and 3
2. -3
3. (-3, 1)
4. as $x \to -\infty,\ f(x) \to -\infty$
   as $x \to +\infty,\ f(x) \to +\infty$
5. Domain: $(-\infty, 4]$
   Range: [-4, $+\infty$)
6. (-3, -2) and (4, -5)
7. as $x \to -\infty,\ f(x) \to +\infty$
   as $x \to +\infty,\ f(x) \to +\infty$
8. (-3, 0) and (4, ∞)
9. Domain: {-1, 2, 3, 4}
   Range: {-4, 3, 6, 7}
10. Domain: (-5, 4]
    Range: [-6.1, -1]
11. C, D
12. 

13. B
14. x-intercept is 5; y-intercept is –15.

15. 

16. 

17. 

18. C, E