

2.6
LESSON

Practice

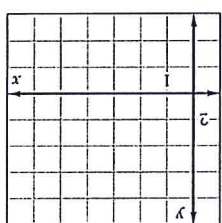
For use with pages 112-120

Name _____ Date _____

Draw a scatter plot of the data. Tell whether the data have a positive correlation, a negative correlation, or approximately no correlation.

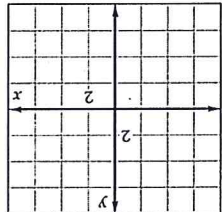
1.

x	0	0.5	1.25	2.75	3
y	3.25	3.5	4.25	4.75	5.25
x	3.5	4.25	4.75	5.25	6
y	-3.5	-2	-0.75	1.25	2.5
y	3.25	5.5	7	8.25	9.5



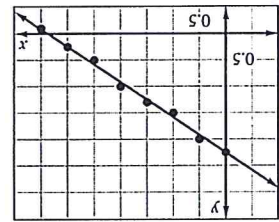
2.

x	-1.5	-1	-0.75	0	1.5
y	-5.25	-2.5	4	5.75	-1.75
x	2	2.25	3	3.5	4
y	-3	4.25	5.5	1.75	-1.25

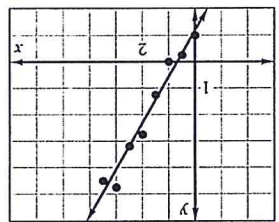


Approximate the best-fitting line for the data.

3.

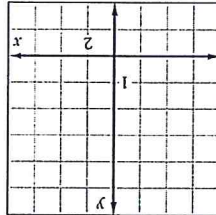


4.



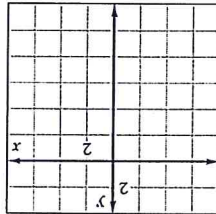
x	0	-1	-2	-3	-4
y	1	2	1.5	3	2.5
x	4	3	2	1	2
y	2.5	0.5	3.5	2	2.5

7.



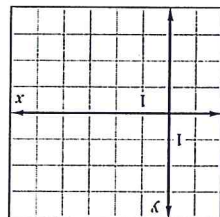
x	0	-1	-2	-3	-4
y	-4.2	-1.5	0	-0.5	2
x	4	3	2	1	2
y	-11.4	-9.5	-8.8	-5.8	-11.4

6.



x	0.5	1	1.5	2	2.5
y	-2.25	-2.75	-1.7	-0.5	0
x	3	3.5	4	4.5	5
y	-0.6	1.2	1.9	2.5	2.3

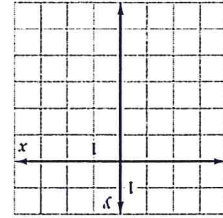
5.



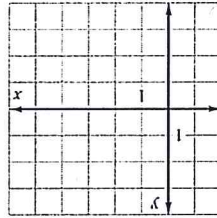
Draw a scatter plot of the data. Approximate the best-fitting line for the data.

LESSON 2.6
Practice
continued
For use with pages 112-120

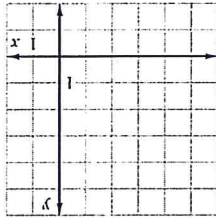
Name _____
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10. $y = |x| - 3$
Graph the function.



11. $f(x) = |x - 3|$



12. $y = |x + 2| + 1$

7. $y = \frac{2}{5}|x + 9| - 1$

8. $f(x) = \frac{8}{7}|x + 3| - 9$

9. $y = -\frac{5}{7}|x - 1| + 1$

4. $f(x) = 2|x + 2| + 8$

5. $y = -\frac{3}{2}|x + 1|$

6. $f(x) = -|x| - 5$

1. $y = -|x + 1|$

2. $f(x) = 7|x - 3| - 4$

3. $y = -4|x + 2| + 2$

For the function (a) tell whether the graph opens up or down, (b) identify the vertex, and (c) tell whether the function is wider, narrower, or the same width as the graph of $y = |x|$.

LESSON 2.7
Practice
For use with pages 121-129

Name _____ Date _____

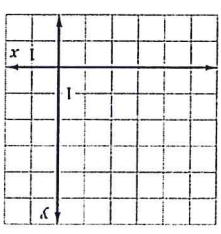
LESSON
2.1

Practice
continued

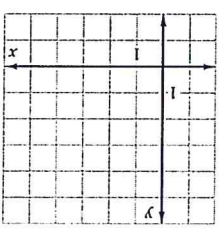
For use with pages 121–129

Name _____

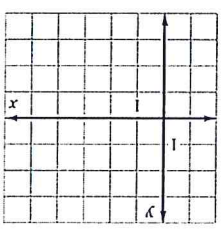
Date _____



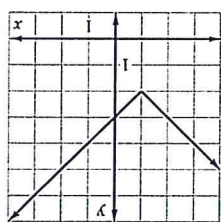
13. $y = 2|x + 1| - 1$



14. $f(x) = \frac{7}{2}|x - 3| + 2$

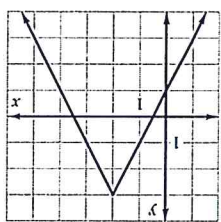


15. $y = -\frac{2}{3}|x - 4| + 2$

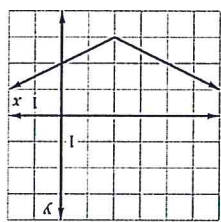


16.

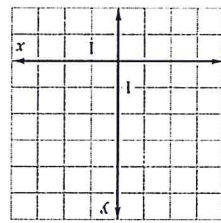
Write an equation of the graph shown.



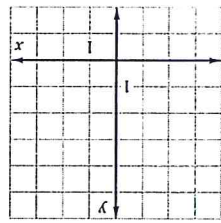
17.



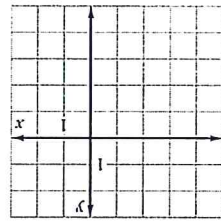
18.



19. $y = f(x) + 1$



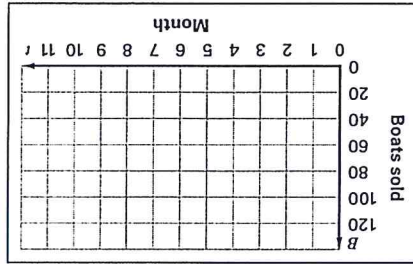
20. $y = f(x - 2)$



21. $y = -2f(x)$

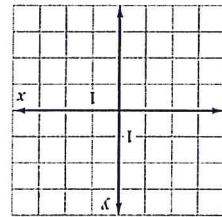
Let $f(x) = x + 2$. Sketch $f(x)$ and then sketch the function y given by the transformation to $f(x)$.

27. What is the minimum number of sales in one month? In what month is the minimum reached?
26. What is the maximum number of sales in one month? In what month is the maximum reached?

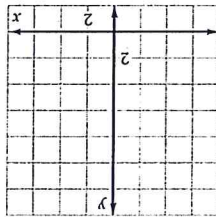


25. Graph the function for $0 \leq t \leq 12$.
 Speedboats The number of boats B a boat dealer sells in each month of the year can be modeled by the function $B = -15|t - 5| + 120$ where t is the time in months and $t = 1$ represents January.

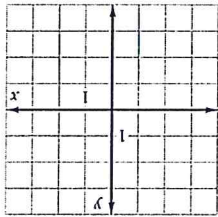
In Exercises 25–27, use the following information.



22. $y = \frac{1}{4}f(x)$



23. $y = 3f(x + 2) - 1$



24. $y = -f(x - 1) + 3$

2.7 LESSON
Practice continued
 For use with pages 121–129

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LESSON
2.8

Practice

For use with pages 132–138

Tell whether the given ordered pairs are solutions of the inequality.

1. $x - y < 4$; (5, 4), (-1, -4)

2. $2x + 3y \leq -3$; (0, -1), (-3, 2)

3. $4x - 2y > 5$; (5, 8), (-1, -4)

4. $8y - 2x \geq 15$; (1, 2), (3, 3)

5. $2y < 5x + 10$; (-2, -1), (-1, 2)

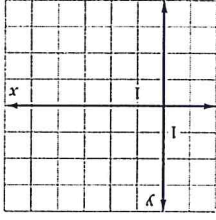
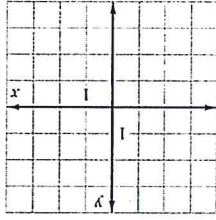
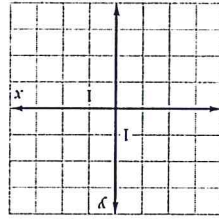
6. $10x \geq 14 - 8y$; (2, 4), (4, -3)

Graph the inequality in a coordinate plane.

7. $x > 2$

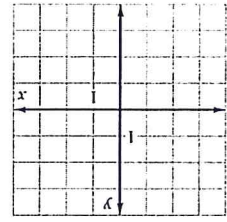
8. $x \leq -1$

9. $2x \leq 8$

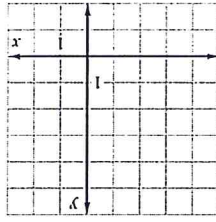


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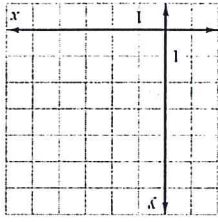
Date _____



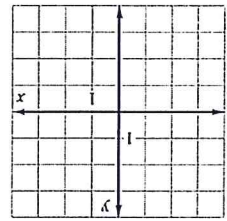
19. $y > 4|x| - 3$



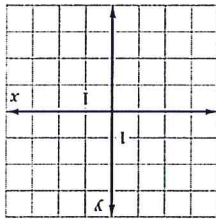
20. $y \geq |x + 1| + 2$



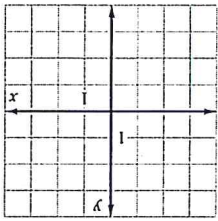
21. $y \leq -\frac{2}{3}|x - 2| + 4$



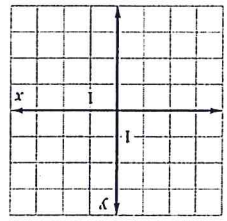
16. $x + 3y \leq 6$



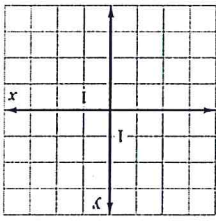
17. $x - 3y > -3$



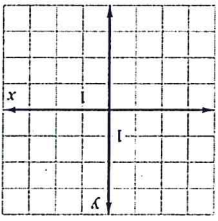
18. $-6x - 2y \leq 4$



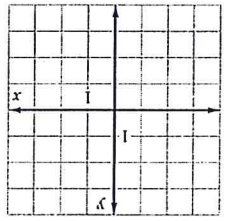
13. $y < 2x - 1$



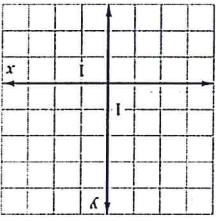
14. $y \geq \frac{2}{3}x + 2$



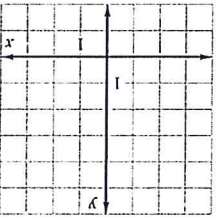
15. $3x + y > -3$



10. $y \geq -2$



11. $y < 3$



12. $\frac{1}{4}y \leq 1$

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LESSON
Practice continued
For use with pages 132-138

Name _____

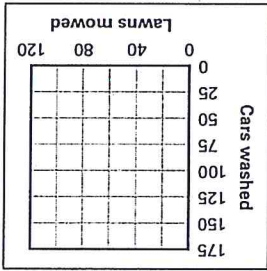
Date _____

LESSON
2.8

Practice
continued
For use with pages 132–138

Name _____ Date _____

In Exercises 22–24, use the following information.
Summer Job You offer to mow your neighbors' lawns for \$20 or to wash their cars for \$10. Your goal is to earn at least \$1500 this summer.
22. Write and graph an inequality that represents the possible number of lawns you would have to mow x and cars you would have to wash y in order to reach your goal.



23. What are the coordinates of mowing 50 lawns and washing 65 cars?

24. Is the point in Exercise 23 a solution of the inequality?

In Exercises 25–27, use the following information.
Music Lessons Your parents have budgeted \$550 for you to take music lessons on the piano for \$25 and on the saxophone for \$20.
25. Write and graph an inequality that represents the possible number of piano lessons x and saxophone lessons y you can take this summer.
26. Is it possible to take 12 piano lessons and 15 saxophone lessons this summer?
27. If you take 14 piano lessons, what is the maximum number of saxophone lessons you can take?

