Name _____ Date _____ Class _____

CHAPTER 7

At-Home Practice

Graphs

Determine whether each set of data has a constant or variable rate of change.

1.

x	0	3	6	9	12	15	18
y	5	10	15	20	25	30	35

_____

2.

x	1	5	9	13	17	21	25
y	2	5	7	11	13	13	18

_____

Find the slope of the line that passes through the given points.

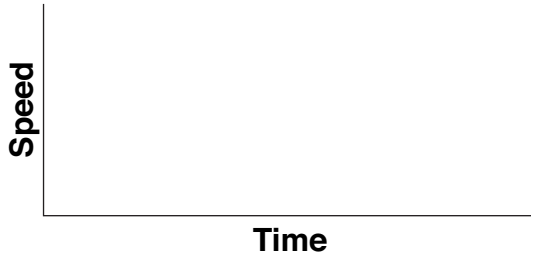
3. (1, 5) and (2, 3) _____

4. (0, 0) and (7, 2) _____

5. (−1, 3) and (2, 2) _____

6. (−2, −5) and (−7, 5) _____

7. During a workout for track, Henry started by walking a lap. He then jogged two laps, and sprinted for half of a lap. After his sprint, Henry walked another lap before stopping. Sketch a graph to show Henry's speed compared to time.



Find each equation of direct variation, given that *y* varies directly with *x*.

8. *y* is 6 when *x* is 3 _____

9. *y* is 5 when *x* is 1 _____

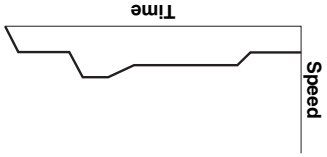
10. *y* is 20 when *x* is 15 _____

11. *y* is 1 when *x* is −1 _____

12. *y* is −56 when *x* is 16 _____

13. *y* is 0 when *x* is 3 _____

Answers: 1. constant 2. variable 3. −2 4. $\frac{2}{7}$ 5. $-\frac{1}{3}$ 6. −2 7. Possible answer:



8. $y = 2x$ 9. $y = 5x$ 10. $y = \frac{4}{3}x$ 11. $y = -x$ 12. $y = -\frac{7}{2}x$ 13. $y = 0$

Name _____ Date _____ Class _____

CHAPTER 7

Family Fun

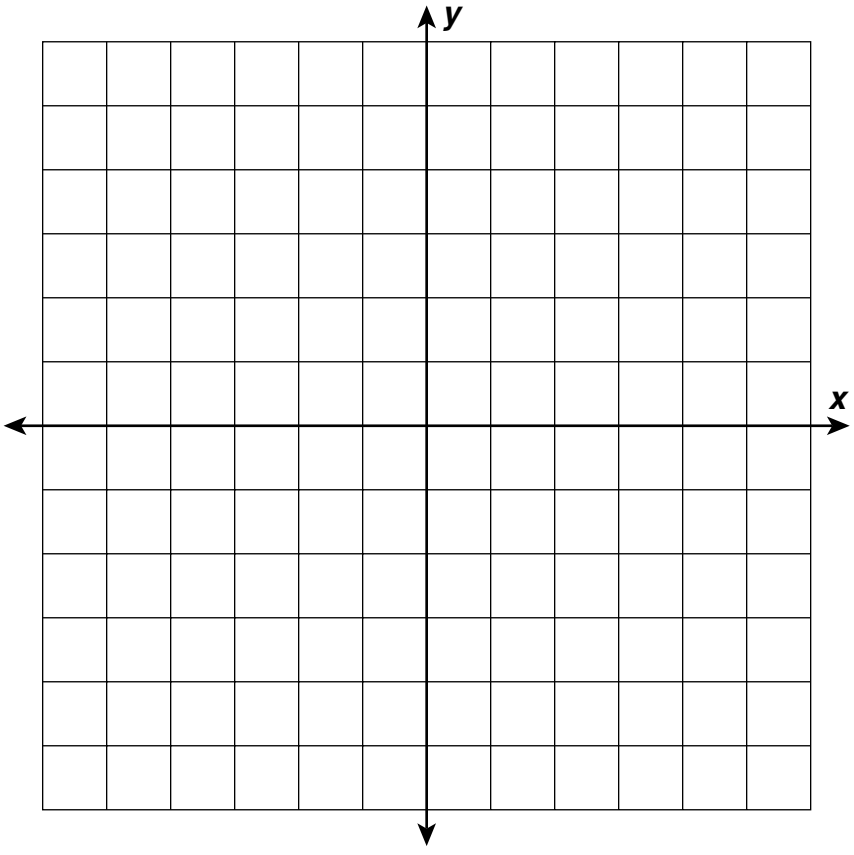
Find the Shape

Directions

- Graph the line that contains each point and has each slope below.
- Use a dark pen or marker to outline the area bordered by all of the lines.
- Determine the shape created by the lines.

Graph:

(0, 2), slope 0
(3, −2), slope 0
(1, −3), slope 1
(2, 2), slope −1
(5, 2), slope 1
(−4, 1), slope −1



Answer: Hexagon