

Algebra II Practice Quiz 2.3

Short Answer

1. (5 points) Determine whether the data set could represent a linear function.

x	$f(x)$
0	1
1	0
2	$\frac{1}{2}$
3	$\frac{1}{3}$

2. (5 points) Graph the line with slope $-\frac{1}{3}$ that passes through $(6, 4)$.

3. (5 points) Find the intercepts of $-x - y = 2$, and graph the line.

4. (5 points) Write the function $5x + 10y = -20$ in slope-intercept form. Then graph the function.

5. (5 points) Determine if $x = -2$ is vertical or horizontal. Then graph.

6. (5 points) There was \$1,400 in Naomi's school art and music fund when school began. Then the parents' group held a 12-day fundraiser to reach the school's goal of \$6,000. Find the average amount of money per day the parents raised. Graph the daily amount of money in the fund during the 12-day parent fundraiser.

Name: _____

ID: A

7. (5 points) Determine whether the data in the table are linear. Explain.

Session Length (min)	4	9	14	21	27
Cost (\$)	2.90	4.65	6.40	8.85	10.95

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Answer Section

SHORT ANSWER

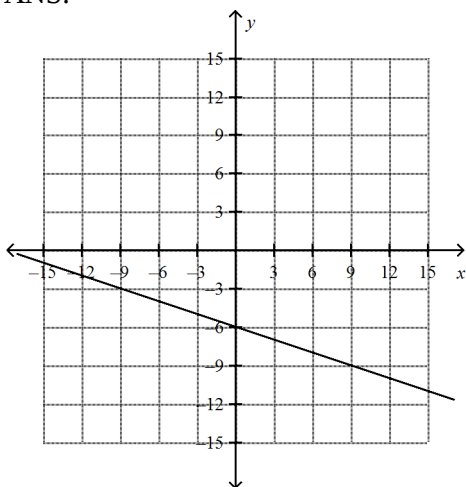
1. ANS:

Yes, the data set could represent a linear function.

PTS: 5

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2. ANS:

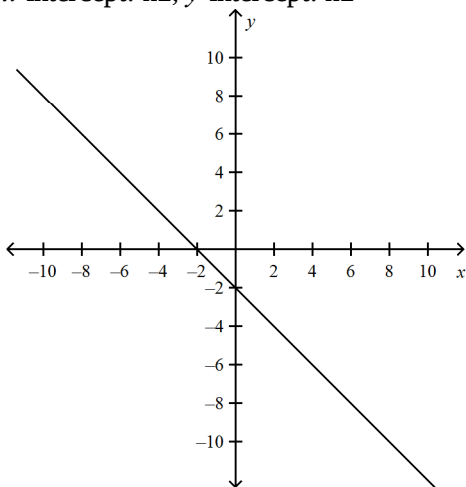


PTS: 5

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3. ANS:

x -intercept: -2 , y -intercept: -1

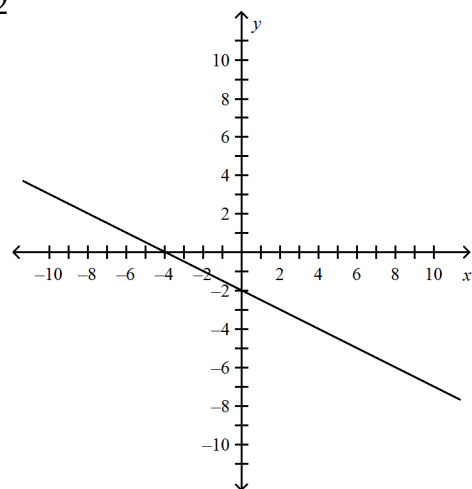


PTS: 5

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4. ANS:

$$y = -\frac{1}{2}x - 2$$

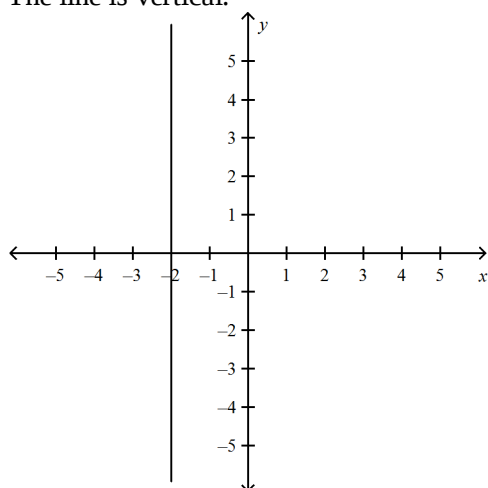


PTS: 5

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5. ANS:

The line is vertical.

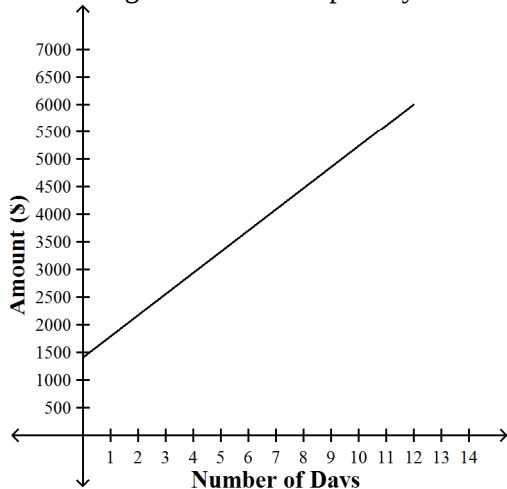


PTS: 5

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6. ANS:

The average amount raised per day is about \$383.33.



PTS: 5

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7. ANS:

Yes, the rate of change is constant. For example, to the nearest hundredth, $\frac{4.65 - 2.90}{9 - 4} = \frac{1.75}{5} = 0.35$,

$\frac{6.40 - 4.65}{14 - 9} = \frac{1.75}{5} = 0.35$, and so on.

PTS: 5