

**Pre-Algebra
Secondary Education
MAFS.8.F.1.3**



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for this Standard**

Name: _____ Date: ___/___/___

1. Select all of the equations below that are linear functions.

- A. $y = 3x + 6$
- B. $y - 2 = 6(x - 4)$
- C. $x + 6 = 7$
- D. $3x + 8y = 0$
- E. $y = -9$

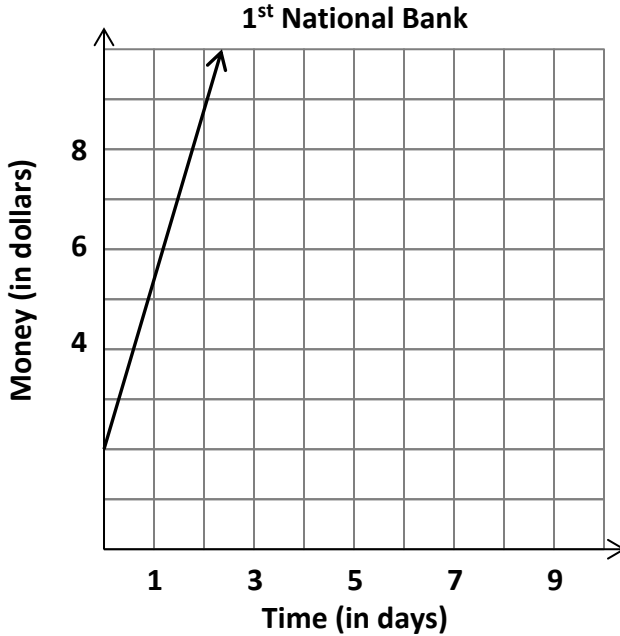
2. Johnny and Cage are working together to mold figurines for a craft fair. They already have 8 figurines which were left from the last craft fair. Johnny and Cage can mold 3 figurines every hour. Determine whether this situation is linear or nonlinear? Explain your reasoning

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3. Is the function in the graph below linear or non-linear? Explain your reasoning.



4. Select all of the following that are non-linear functions. ($x \neq 0$)

A. $y = 12.3(x)^2$

B. $y = 5.25x - 6$

C. $x = 9.50y - 2$

D. $y = 6.7x$

E. $y = 2.25x^3 + 7$

F. $y = 7.2x + 3$

5. A function contains the ordered pairs below. Which statement accurately explains whether or not the function is linear?

x	y
4	7
6	3
8	1

- A. The function is not linear because the y -coordinate is not a constant multiple of the x -coordinate
- B. The function is not linear because the difference in the x -coordinate is not consistent.
- C. The function is not linear because it does not have a constant rate of change.
- D. The function is linear because both the x - and y -coordinates are constant.

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