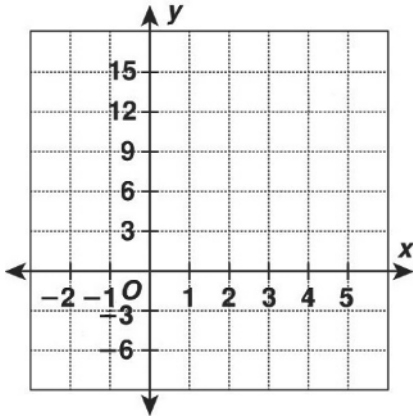**LESSON 6-2**

Describing Functions

Practice and Problem Solving: A/B

Graph each equation. Tell whether the equation is linear or nonlinear.
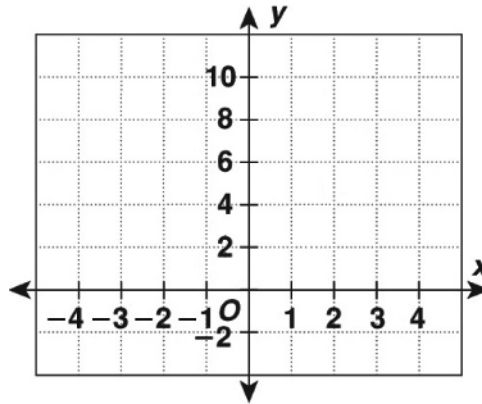
1. $y = 3x$

Input, x	−1	0	1	2	4
Output, y					

2. $y = x^2 + 1$

Input, x	−2	−1	0	1	2
Output, y					

_____

_____

Tell whether each equation can be written in the form $y = mx + b$.
Write *yes* or *no*. If *yes*, write the equation in the form $y = mx + b$.

3. $y = 8 - x^2$

4. $y = 4 + x$

5. $y = 3 - 2x$

_____   _____   _____

The amount of water in a tank being filled is represented
by the equation $y = 20x$, where y is the number of gallons
in the tank after x minutes.

6. Complete the table of values for this situation.

Time (min), x	0	1	2		4
Water (gal), y				60	

7. Sketch a graph of the equation.

8. Use your graph to predict the amount of water in the tank after 6 minutes.

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9. Explain how you know whether relationship between x and y is linear or nonlinear.

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