

## Chapter 10 – Graphing Functions Pre Test

**Directions:** Try these five problems without using any resources to help you and record the number of questions you answer correctly. The goal is to give you a snapshot of your current knowledge on this topic and a preview of the chapter to come. Use a calculator only if you need to.

# Correct:
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1.) A line in the  $xy$ -plane passes through the origin and has a slope of  $\frac{1}{8}$ . Which of the following points lies on the line?

- A) (0,8)
- B) (1,8)
- C) (8,8)
- D) (16,2)

2.) In the  $xy$ -plane, the graph of line  $m$  has slope  $-2$ . Line  $n$  is parallel to line  $m$  and goes through point  $(6,0)$ . Which of the following is an equation of line  $n$ ?

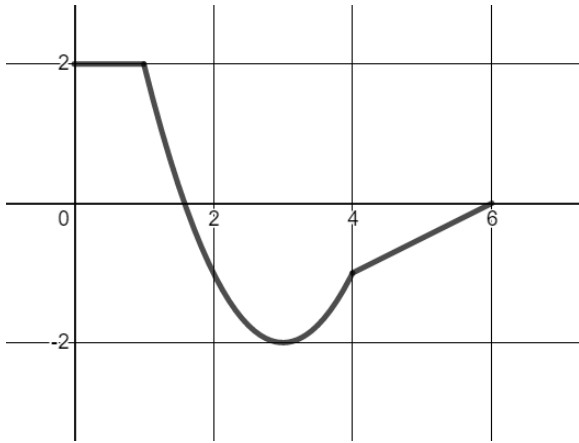
- A)  $y = -2x + 12$
- B)  $y = -x + 6$
- C)  $y = -\frac{1}{2}x + 3$
- D)  $y = \frac{1}{2}x - 3$

3.) In the  $xy$ -plane, point  $Z$  is contained in the graph of the solution set of the system of inequalities below. Which option could be the coordinates of point  $Z$ ?

$$y > 3x + 2$$
$$y \leq -x$$

- A)  $(-1,2)$
- B)  $(-2,1)$
- C)  $(0,-2)$
- D)  $(2,-2)$

4.) The complete graph of the function  $h$  is shown in the  $xy$ -plane below. For what value of  $x$  is  $h(x)$  at its minimum?



- A) -2
- B) 0
- C) 3
- D) 6

5.) In the  $xy$ -plane, the graph of  $y = (x - 5)^3 + 2$  is an image of the graph of  $y = (x + 3)^3 + 2$  after a translation of how many units to the right?

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.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
0	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Answer Key:**

1.) D

2.) A

3.) B

4.) C

5.) 8