

**Section 13-3:  
Linear and  
Non-Linear**

"Linear" means Line

Linear Equations:  $x$  with  $+$ ,  $-$ ,  $\cdot$ ,  $\div$

Non-Linear: Exponents &  
Absolute Values

$$x^4 \text{ or } |x|$$

1.  $y = 2x + 5$

Linear

2.  $y = x^2 + 1$

Non-Linear

3.  $y = \frac{x}{3} - 2$

Linear

4.  $y = 0.4x^4 - 4$

Non-Linear

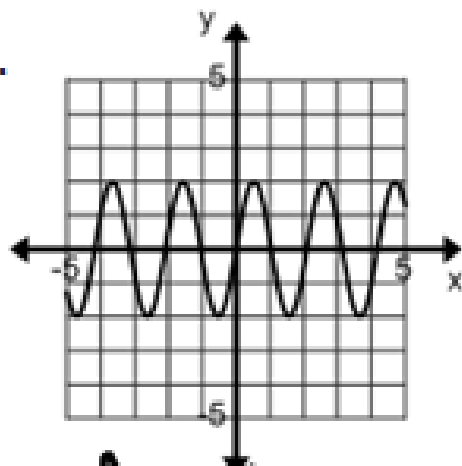
5.  $y = x$   
Linear

6.  $y = |2x + 1|$   
Non-Linear

7.  $y = \frac{x^2}{2}$   
Non-Linear

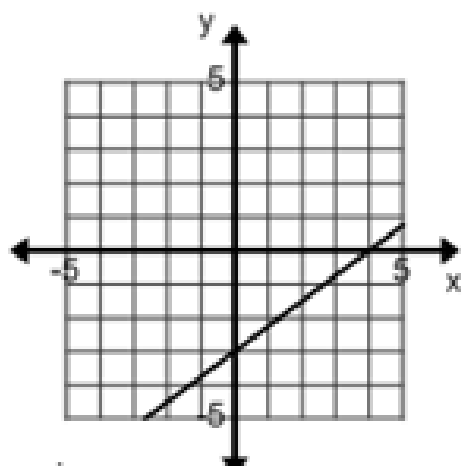
8.  $y = 4x$   
Linear

11.



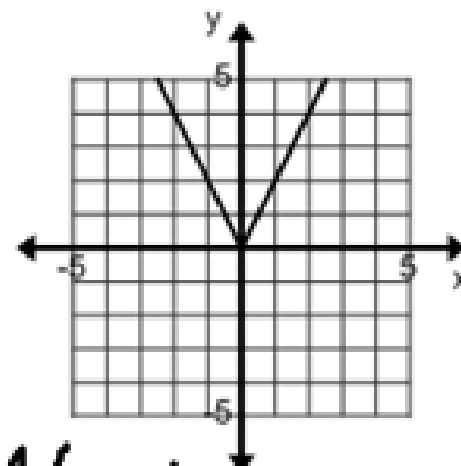
Non-Linear

12.



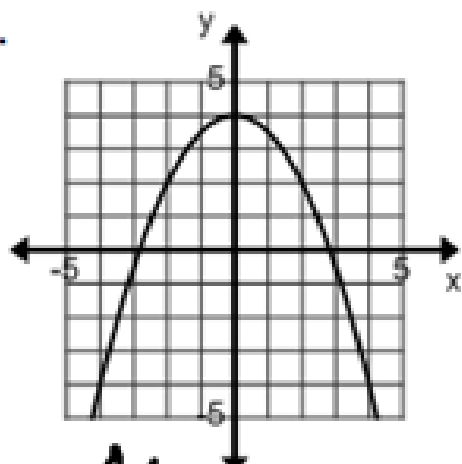
Linear

13.



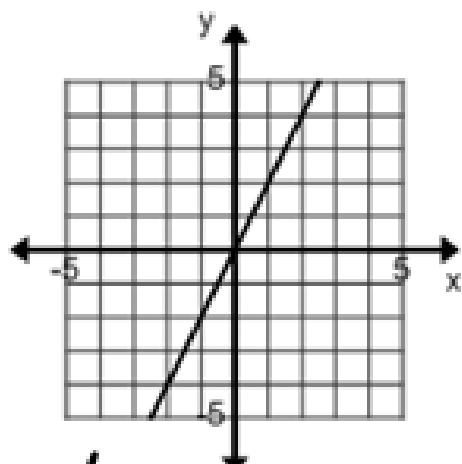
Non-Linear

14.



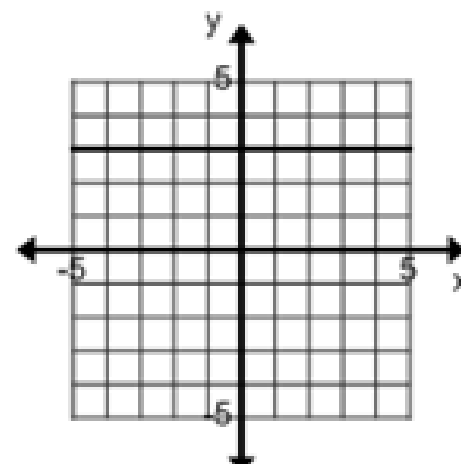
Non-Linear

15.



Linear

16.



Linear