

Name _____

Mrs. Roubos

Date _____

8R Period _____

Classwork Day 5

1. Which of the following equations is non-linear?

1) $y = x + 6$

2) $y = 4x + 10$

3) $y = x^2 + 4$

4) $y = 5x$

**Steps: _____

2. Does the following relations represent a function? : $\{(2,6), (2,7), (4,5)\}$

**Steps: _____

3. What is the volume of a cylinder whose radius is 3 and whose height is 8? Round to the nearest hundredth.

$$V = \pi r^2 h$$

**Steps: _____

4. In terms of π , what is the volume of a sphere with a radius of 4 inches? $V = \frac{4}{3} \pi r^3$

**Steps: _____

5. Find the volume, to the nearest cubic inch, of a cone with a radius of 6 and a height of 8.

$$V = \frac{1}{3} \pi r^2 h$$

**Steps: _____

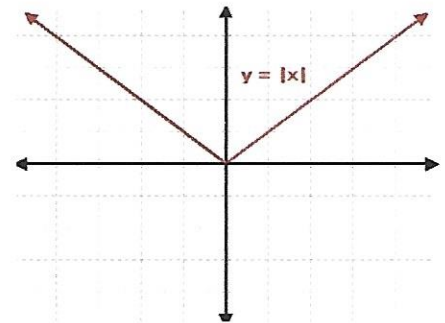
6. Solve $a^3 = 125$

**Steps: _____

7. Given an example of a number that is a perfect square?

**Steps: _____

8. Does the following graph represent a function?



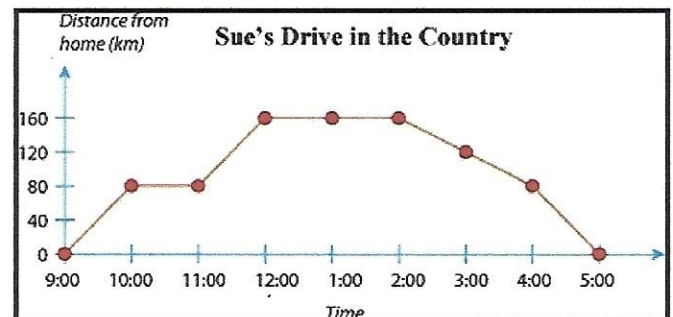
**Steps: _____

9. Does the following table represent a function?

x	y
1	2
2	4
3	6
4	8
5	10

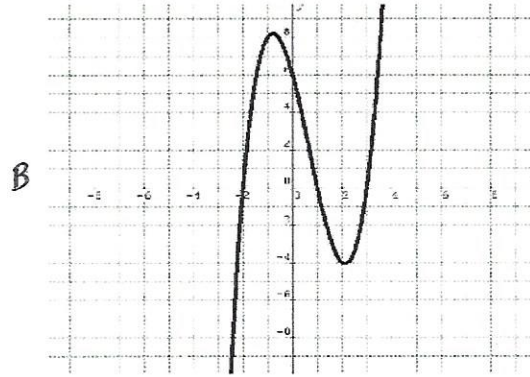
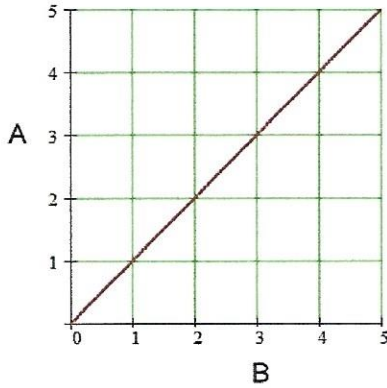
**Steps: _____

10. What did Sue do between 12-2 pm?



**Steps: _____

11. Which of the following graphs is non-linear?



**Steps: _____

Now you try!

12. Which of the following equations is non-linear?

1) $y = x^2 + 2$

3) $y = x + 4$

2) $y = 8$

4) $y = 5x + 12$

13. Does the following relations represent a function? : $\{(1,7), (5,9), (2,7)\}$

14. What is the volume of the cylinder whose radius is 5 and whose height is 12? Round to the nearest hundredth.

15. In terms of π , what is the volume of a sphere with a radius of 7 inches?

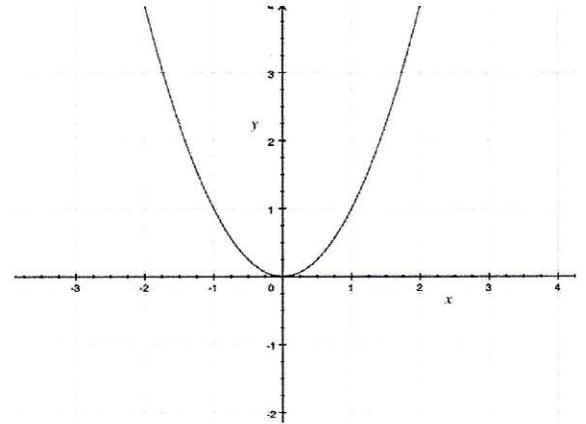
16. Find the volume, to the nearest cubic inch, of a cone with a radius of 3 and a height of 9.

$$V = \frac{1}{3} \pi r^2 h$$

17. Solve $a^3 = 8$

18. Is 225 a perfect square? Why or why not

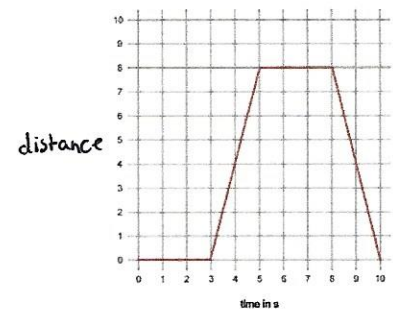
19. Does the following graph represent a function?



20. Does the following table represent a function?

x	y
2	1
8	2
4	7
6	5
8	9

21. What happened between 5 & 8 seconds?



22. Is the following graph linear or non-linear?

