

Name: _____ 8th Math – Homework Week 26

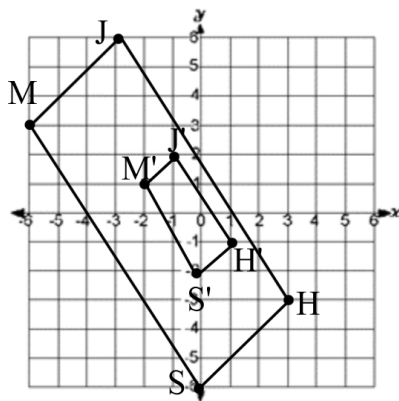
1. Solve the equation.

$$1.89 - 0.4x = 0.39 - 0.15x$$

2. A half-gallon of ice cream is in the shape of a cylinder. The height of the cylinder is 17.5 cm and the diameter is 20 cm. To the nearest tenth, how many cubic centimeters of ice cream are inside of the container?

3. A canister of tennis balls has a height of 8.1 inches. If Javier is making a label for the canister, how many square inches of paper will he need if the diameter of the canister is 2.7 inches?

4. Which of the following rules could be used to represent the given transformation?



a. $(x, y) \rightarrow (x + 2, y - 2)$

b. $(x, y) \rightarrow (\frac{1}{3}x, \frac{1}{3}y)$

c. $(x, y) \rightarrow (\frac{1}{3}x, 3y)$

d. $(x, y) \rightarrow (3x, 3y)$

5. The volumes of some containers were given below. Write the volumes in order from greatest to smallest.

36π , 2.04×10^2 , 201, $\sqrt{40,000}$, 1.98×10^2

6. Marcello is building a ladder to get to his above-ground pool. The pool has a height of 5 meters. If the length of the ladder is 10 meters, how far away from the pool is the base of the ladder? Round to tenth.

7. Linda is investing \$4,000 into a savings account. She can chose between an account that earns 3.5% simple interest for 5 years or an account for 4 years that earns 3.25% interest compounded annually. Which account will earn her more money and by how much?

8. A tree is 8 ft. tall when it is planted. It grows $\frac{2}{3}$ ft. every year. Write an equation in slope-intercept form to represent the height, y , after x years.

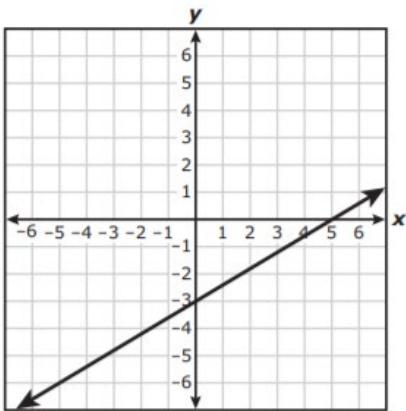
Use the griddables below to answer questions #9 and #10.

9. Find the rate of change from the table below.

| x | y |
|-----|-------|
| -2 | 12 |
| 0 | 3 |
| 3 | -10.5 |
| 7 | -28.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | . | | |
| + | 0 | 0 | 0 | 0 | | 0 | 0 |
| - | 1 | 1 | 1 | 1 | | 1 | 1 |
| | 2 | 2 | 2 | 2 | | 2 | 2 |
| | 3 | 3 | 3 | 3 | | 3 | 3 |
| | 4 | 4 | 4 | 4 | | 4 | 4 |
| | 5 | 5 | 5 | 5 | | 5 | 5 |
| | 6 | 6 | 6 | 6 | | 6 | 6 |
| | 7 | 7 | 7 | 7 | | 7 | 7 |
| | 8 | 8 | 8 | 8 | | 8 | 8 |
| | 9 | 9 | 9 | 9 | | 9 | 9 |

10. A linear equation is graphed below. What is the y-intercept of the line?



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | . | | |
| + | 0 | 0 | 0 | 0 | | 0 | 0 |
| - | 1 | 1 | 1 | 1 | | 1 | 1 |
| | 2 | 2 | 2 | 2 | | 2 | 2 |
| | 3 | 3 | 3 | 3 | | 3 | 3 |
| | 4 | 4 | 4 | 4 | | 4 | 4 |
| | 5 | 5 | 5 | 5 | | 5 | 5 |
| | 6 | 6 | 6 | 6 | | 6 | 6 |
| | 7 | 7 | 7 | 7 | | 7 | 7 |
| | 8 | 8 | 8 | 8 | | 8 | 8 |
| | 9 | 9 | 9 | 9 | | 9 | 9 |