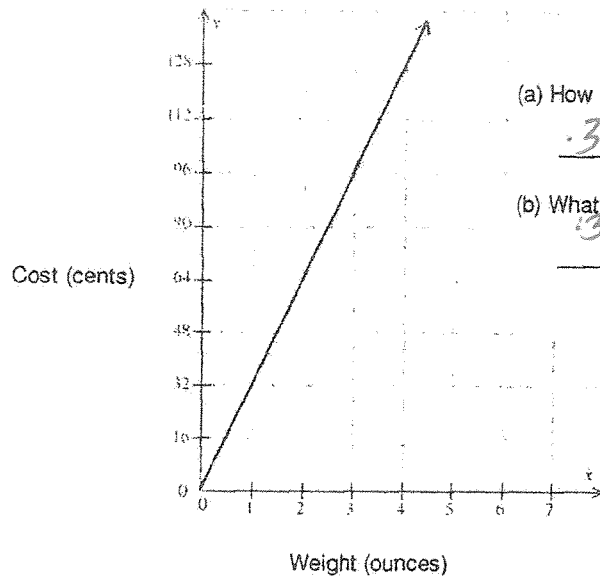


15. Justin buys cheese from the local farmer's market. The graph below shows the cheese cost (in cents) versus its weight (in ounces).

Use the graph to answer the questions.



(a) How much does the cost of the cheese increase for each ounce Justin buys?

.32 cents

(b) What is the slope of the line?

.32

17. Fill in the table using this function rule.

$$y = 22 - 3x$$

x	y
1	<input type="text" value="19"/>
2	<input type="text" value="16"/>
3	<input type="text" value="13"/>
5	<input type="text" value="7"/>

16. Rewrite using a single positive exponent.

$$7^{-3} \cdot 7^{-6}$$

$$\frac{1}{7^3} \cdot \frac{1}{7^6} = \frac{1}{7^9}$$

18. Let y represent the total cost of publishing a book (in dollars). Let x represent the number of copies of the book printed. Suppose that x and y are related by the equation $10x + 1250 = y$.

Answer the questions below.

Note that a change can be an increase or a decrease.

For an increase, use a positive number. For a decrease, use a negative number.

What is the change in the total cost for each book printed?

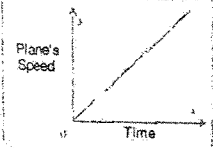
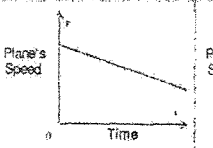
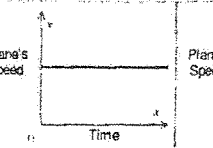
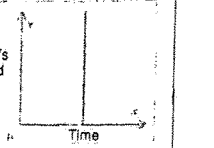
\$ 10

What is the cost to get started (before any books are printed)?

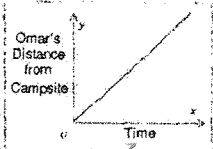
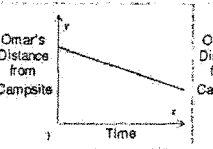
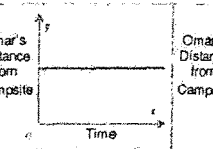
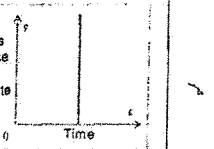
\$ 1250

11. For each scenario below, choose the best graph.

(a) A plane goes slower after landing.

			
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

(b) Omar hikes away from his campsite.

			
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

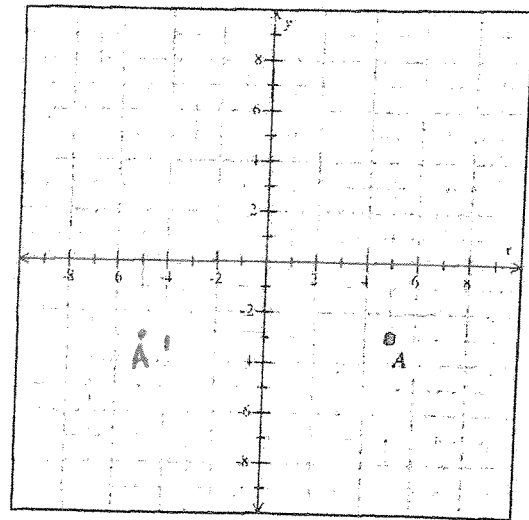
12. The point A is shown below.

Reflect A across the y-axis.

Then reflect the result across the x-axis.

Plot the final point.

Important: Only plot the final point in your answer.



5, -3

$$A' = (-5, -3)$$

13. Solve for w.

$$\frac{5}{3} = \frac{w-3}{4}$$

$$\frac{5}{1} \cdot \frac{4}{3} = \frac{3 \cdot w - 3}{1 \cdot 4}$$

$$4 \cdot 5 = \frac{3w - 3}{4} \cdot 4$$

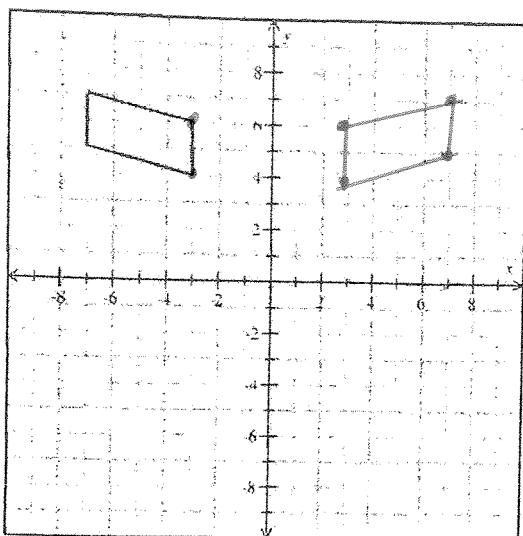
$$20 = 3w - 3$$

$$\frac{29}{3} = \frac{3w}{3}$$

$$w = 9 \frac{2}{3}$$

Simplify your answer as much as possible.

6. Reflect the figure across the y-axis.
Then answer the questions below.



Are the statements below true or false?

When the figure is reflected, the final angle measures are smaller than the original angle measures.

True False

When the figure is reflected:

If two sides are parallel to each other in the original figure, then those sides may *not* be parallel to each other in the final figure.

True False

When the figure is reflected, its side lengths stay the same.

True False

7. A swimming pool has to be drained for maintenance. The pool is shaped like a cylinder with a diameter of 8 m and a depth of 1.5 m. Suppose water is pumped out of the pool at a rate of 19 m^3 per hour. If the pool starts completely full, how many hours will it take to empty the pool?

Use the value 3.14 for π , and round your answer to the nearest hour. Do not round any intermediate computations.

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

$$V = 3.14 \times 4^2 \times 1.5$$

$$75.36 \text{ m}^3 = \frac{19 \text{ m}^3}{\text{hr}} \times 4 \text{ hrs}$$