TEST NAME: **7RP1&2-E**

TEST ID: **1696993**

GRADE: **07 - Seventh Grade**

SUBJECT: **Mathematics**

TEST CATEGORY: **My Classroom**

Student: _____

Class: _____

Date: _____

1. Andrew proofread $\frac{1}{4}$ of a page of a technical report in $\frac{2}{5}$ of an hour. What is the unit rate at which he proofread the pages?

   A. $\frac{1}{3}$ page per hour

   B. $\frac{5}{8}$ page per hour

   C. $1\frac{3}{5}$ pages per hour

   D. $\frac{13}{20}$ page per hour

2. Aliya hikes up a mountain for 2 hours. During this time, she hikes a distance of $1\frac{1}{3}$ miles. Which expression shows Aliya's rate in miles per hour?

   A. $\frac{1\frac{1}{3} \text{ miles}}{2 \text{ hours}}$

   B. $2 \text{ hours} + 1\frac{1}{3} \text{ miles}$

   C. $1\frac{1}{3} \text{ miles} - 2 \text{ hours}$

   D. $\frac{2 \text{ hours}}{1\frac{1}{3} \text{ miles}}$

3. An artist made a design using tiles. The design had an area of $\frac{3}{2}$ square meters, and each tile used in the design had an area of $\frac{1}{10}$ square meters. A different design by the artist used 19 of the same tiles. What is the difference between the number of tiles used for the two designs?

A. 1 tile

B. 2 tiles

C. 3 tiles

D. 4 tiles

4. A box contains $13\frac{3}{4}$ ounces of spaghetti. A serving size is $1\frac{1}{4}$ ounces. How many servings are in one box of spaghetti?

A. 17

B. 15

C. 11

D. 9

5. Sara used $4\frac{1}{2}$ packs of pencils in the first $\frac{1}{4}$ of the year. At what rate is Sara using pencils?

A. $1\frac{1}{8}$ packs per year

B. 6 packs per year

C. $16\frac{1}{8}$ packs per year

D. 18 packs per year

6. A bag of chips holds $23\frac{1}{2}$ ounces. One serving is $\frac{2}{3}$ of an ounce. ***About*** how many servings are in the bag?

A. 16

B. 23

C. 24

D. 35

7. **While in Europe, Mr. Trent exchanged some American dollars for the European currency, euros. He was given 35 euros for $45.00. What was the approximate exchange rate in euros per dollar?**

A. 0.10

B. 0.78

C. 1.29

D. 3.50

8. Kevin purchased $165\frac{1}{3}$ ft^2 of hardwood floor to install in his living room. This amount covered $\frac{3}{4}$ of the room. How many square feet of flooring will cover Kevin's living room floor?

A. $206\frac{7}{12}$ ft^2

B. $220\frac{4}{9}$ ft^2

C. $238\frac{2}{3}$ ft^2

D. $289\frac{1}{3}$ ft^2

9. Susan used $9\frac{5}{8}$ kilowatts of electricity to power her house for $5\frac{1}{2}$ hours. On average, how many kilowatts did Susan use per hour?

A. $\frac{4}{7}$

B. $1\frac{2}{3}$

C. $1\frac{3}{4}$

10. In a fireplace, about $\frac{3}{4}$ of an 18-inch log will burn in $\frac{1}{3}$ of an hour. How many hours will it take to burn $2\frac{1}{2}$ logs?

A. $\frac{3}{4}$ of an hour

B. $\frac{9}{10}$ of an hour

C. $1\frac{1}{9}$ hours

D. $2\frac{1}{4}$ hours

11. An mp3 player can store 250 songs for each 1 gigabyte of memory. If this proportional relationship remains constant, which equation can be used to determine how many songs, *s*, can be stored on an mp3 player with *g* gigabytes of memory?

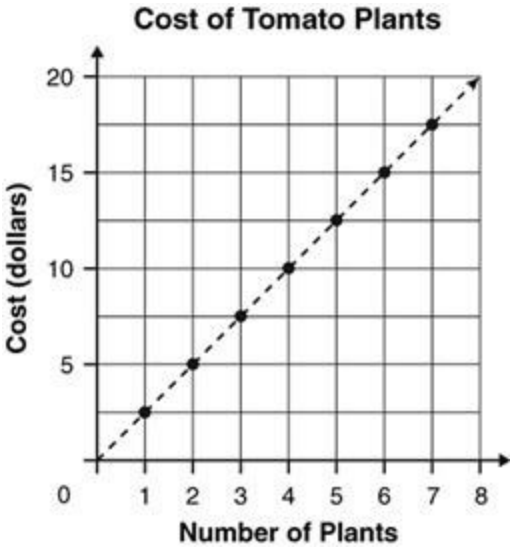
A. $250 + g = s$

B. $250 - g = s$

C. $250 \times g = s$

D. $250 \div g = s$

12. **The graph below shows the cost of tomato plants for each plant purchased.**

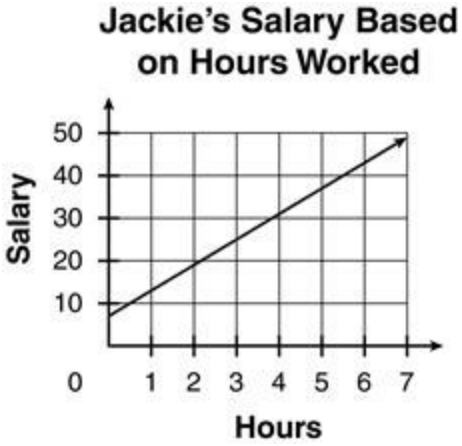


What is the cost of one tomato plant?

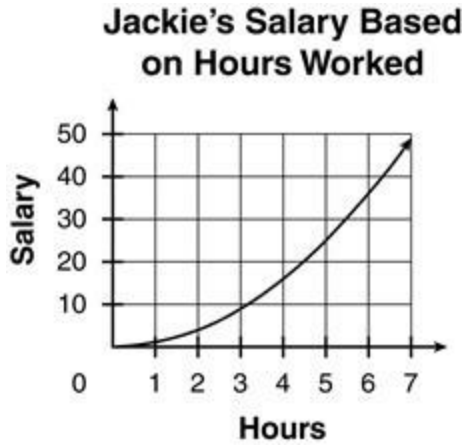
A. $0.40
B. $2.00
C. $2.50
D. $5.00

13. **Jackie's salary is proportional to the number of hours she works. Knowing that she made $49 in 7 hours, which graph best models the relationship between the number of hours Jackie works and her salary?**

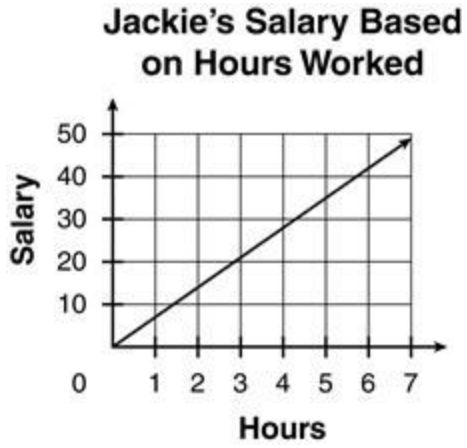
A.



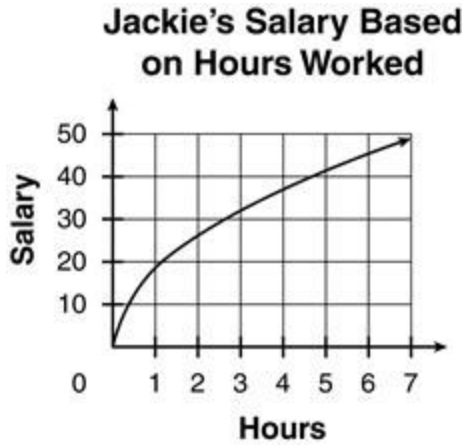
B.



C.



D.



14. Which set of ordered pairs represents a proportional relationship between the *x* and *y* values?

A. (0, 0), (1, 2), (2, 4)

B. (0, 0), (1, 2), (3, 4)

C. (0, 0), (1, 2), (2, 1)

D. (0, 0), (1, 2), (3, 9)

15. A game inventor created a board game that has 15 pieces per game. Which equation shows the relationship between *t*, the total number of pieces, and *n*, the number of copies of the board game the inventor wants to make?

A. $t = n + 15$

B. $t = 15n$

C. $t = \frac{n}{15}$

D. $t = \frac{15}{n}$

16. **Which situation best represents a proportional relationship?**

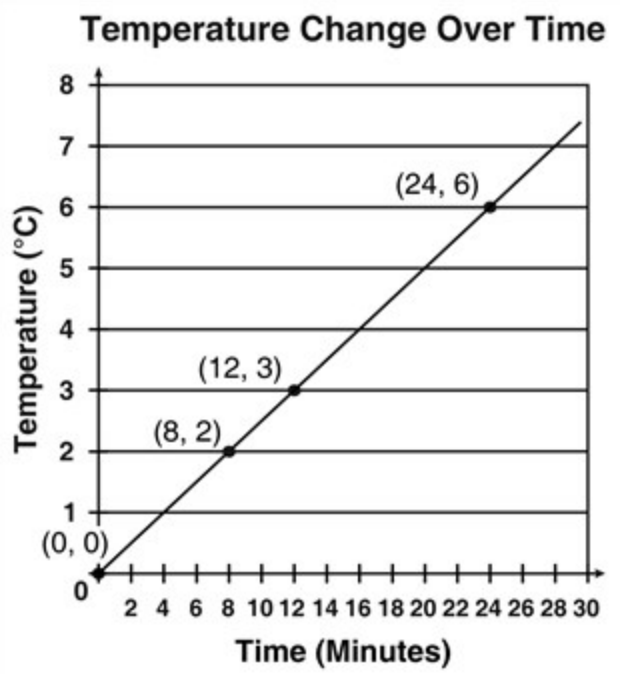
A. A 20 × 24-inch photo is reprinted into a 5 × 6-inch photo.

B. A turtle traveled 1 meter in 1 hour and 2 meters in 2.5 hours.

C. Two pencils are sold for $1. Ten of the same pencils are sold for $6.

D. One apple had 6 seeds, two apples had 8 seeds altogether, and 3 apples had 10 seeds altogether.

17. **The graph shows data from a science experiment in which the temperature of a substance was measured over time.**



What is the constant of proportionality for degrees per minute?

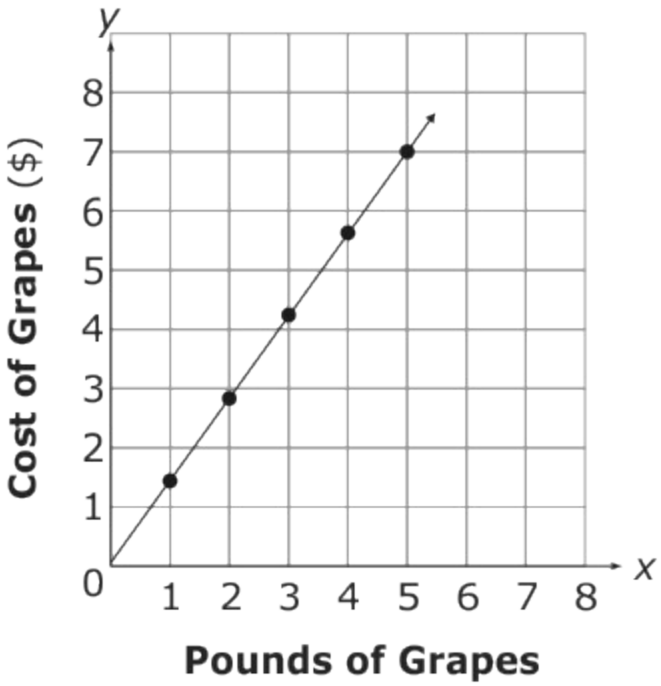
A. 4

B. 2

C. $\frac{1}{2}$

D. $\frac{1}{4}$

18. The graph below shows the cost of grapes when purchased by the pound.



What is the cost for 1 pound of grapes?

A. $0.70

B. $1.25

C. $1.40

D. $1.50

19. **A snail travels 10 inches in 2 hours. Which of the following represents the rate of change the snail traveled with respect to the time?**

A. $\frac{10 \text{ inches}}{2 \text{ hours}}$

B. $\frac{2 \text{ inches}}{10 \text{ hours}}$

C. $\frac{10 \text{ hours}}{2 \text{ inches}}$

D. $\frac{2 \text{ hours}}{10 \text{ inches}}$

20. **This table on a package of dog food tells how much to feed a dog, depending on its weight.**

Weight of Dog (pounds)	15	30	45
Amount of Food (scoops)	2	4	6

The amount of food in scoops (*s*) is related to the weight of the dog in pounds (*p*) by the equation $s = kp$. What is k?

A. 7.5

B. $\frac{2}{15}$

C. 1.5

D. $\frac{4}{15}$