

Name _____

Saturday, April 5, 2014

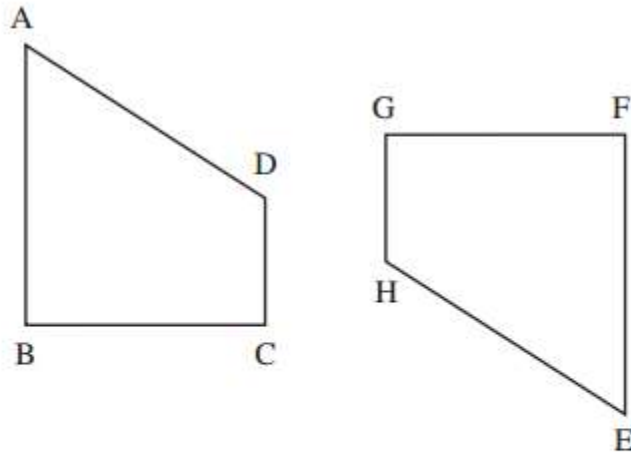
MS319

Saturday Tutoring Program

General Review

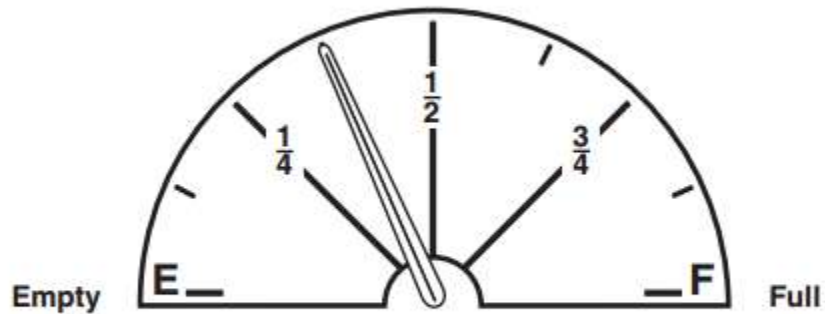
7th Grade

1. Quadrilateral ABCD is congruent to quadrilateral EFGH.



What side of quadrilateral EFGH corresponds to \overline{CD} ?

- A. \overline{EF}
 - B. \overline{EH}
 - C. \overline{FG}
 - D. \overline{GH}
2. Mrs. Suarez looks at the gas gauge to see about how much gas she has left in her tank.



If the gas tank holds 18 gallons when full, what is the most reasonable ESTIMATE of the number of gallons of gas Mrs. Suarez has left in her tank?

Show your work.

3. Rachel earns \$12.50 per hour. Her company deducts 17% of her pay each week for taxes. Rachel uses the formula:

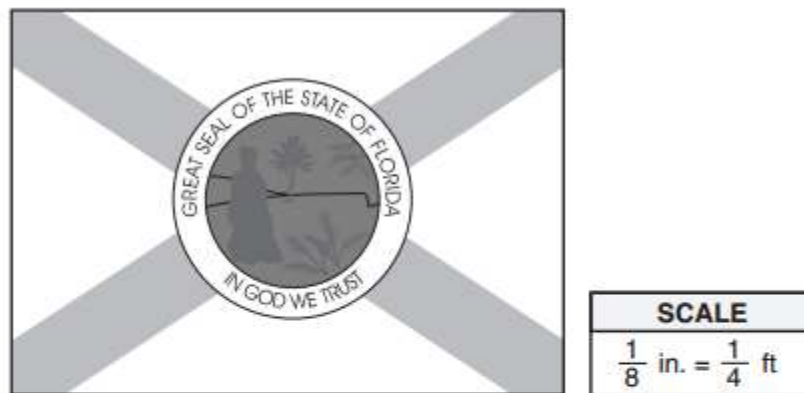
$$E = 0.83(12.50h)$$

to compute her earnings (E) after taxes for the hours (h) she works.

What will be Rachel's earnings, after taxes, if she works 40 hours?

Show your work.

4. A scale drawing of the state flag of Florida measures 2 inches by $2\frac{7}{8}$ inches.



What are the dimensions of the actual flag?

- A. 2 feet \times $2\frac{7}{8}$ feet
- B. 4 feet \times $5\frac{3}{4}$ feet
- C. $4\frac{7}{8}$ feet \times $8\frac{1}{32}$ feet
- D. 8 feet \times $11\frac{1}{2}$ feet

5. A data entry clerk earns \$6.00 per hour plus \$0.50 for each full page of data entered into the computer.

$$E = 6.00h + 0.50p$$

In the equation above, E represents the clerk's earnings, h represents the number of hours worked, and p represents the number of pages entered.

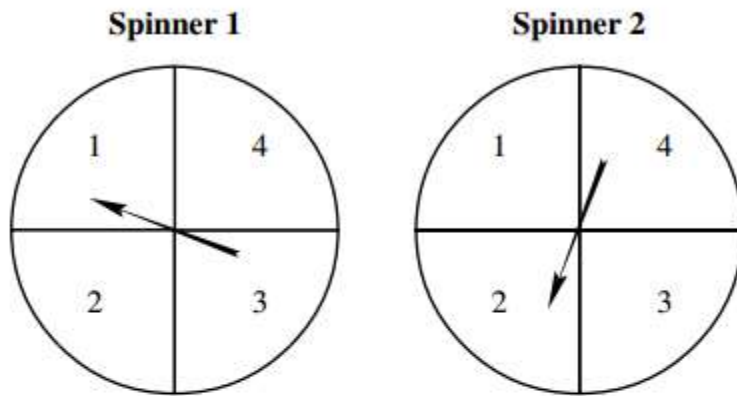
How much money, in dollars, will the clerk earn after working 40 hours and entering 240 full pages of data?

Show your work.

6. What is the value of the expression $\frac{5 + 15 \div (3^2 - 2^2)}{2}$?

Show your work.

7. Cathy has two spinners like those pictured below. She will spin the pointer on each of her spinners one time. She will then add the two numbers on which the pointers land. The chart shows all the possible outcomes.



Spinner 2

	1	2	3	4	
Spinner 1	1	2	3	4	5
	2	3	4	5	6
	3	4	5	6	7
	4	5	6	7	8

What is the probability that the sum of the numbers from Spinners 1 and 2 will be either a 3 or a 7?

Show your work.

8. If the linear pattern continues as shown in this table, what will be the corresponding value of y when $x = 7$?

x	y
1	1
2	3
3	5
4	7
5	9

Show your work.

10. The student council raises money each year by selling snacks at athletic events. The council took a survey to determine which snack students are most likely to buy at athletic events. The results of the survey are shown in the table below.

SNACK SURVEY

	Ice Cream	Chips	Apple	Candy Bar	Popcorn	Soda	Cookies
Number of Votes	77	31	23	100	154	66	49

Based on the survey results, what is the probability that a student, selected at random, would buy a candy bar?

Show your work.

11. A sweater originally cost \$37.50. Last week, Moesha bought it at 20% off.



How much was deducted from the original price?

12. Which equation is true?

A. $\frac{5}{8} = -\left(\frac{-5}{-8}\right)$

B. $\frac{-3}{-4} = -\frac{3}{4}$

C. $-\left(\frac{12}{-17}\right) = \frac{12}{17}$

D. $\frac{9}{-13} = -\left(\frac{-9}{13}\right)$

13. Tracy has \$35 to buy comic books and to pay for a movie ticket. Each comic book costs \$3. The movie ticket costs \$10. Which inequality can be used to determine how many comic books, b , Tracy can buy?

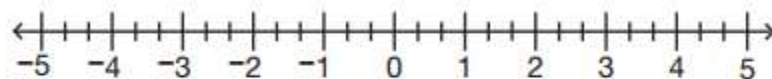
A. $35 - 3b \leq 10$

B. $35 - 3b \geq 10$

C. $35 - 10b \leq 3$

D. $35 - 10b \geq 3$

Use the number line below to answer the question.



14. Which number is 4 units from -1 ?

A. -3

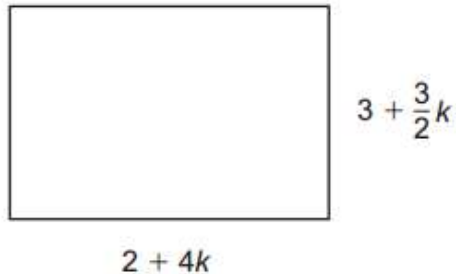
B. -4

C. 3

D. 4

15. A school is designing two parking lots. The design for the first parking lot is shown below.

First Parking Lot Design



The second parking lot is being designed so that its perimeter is $\frac{3}{4}$ of the perimeter of the first parking lot. The perimeter of the second parking lot can be represented by the expression shown below.

$$\frac{3}{4} \left(2(2 + 4k) + 2 \left(3 + \frac{3}{2}k \right) \right)$$

Which other expression also represents the perimeter of the second parking lot?

- A. $\frac{15}{2} + \frac{33}{4}k$
- B. $\frac{15}{2} + 11k$
- C. $9 + 9k$
- D. $10 + 11k$

16. Chico is saving for new shoes that cost \$87. He already has \$9 saved, and he will save the same amount each week. Chico wants to buy the shoes in 6 weeks. The inequality shown below can be used to determine x , the amounts that Chico can save each week and still buy the new shoes in 6 weeks.

$$9 + 6x \geq 87$$

What is the least amount Chico can save each week and still buy the new shoes in 6 weeks?

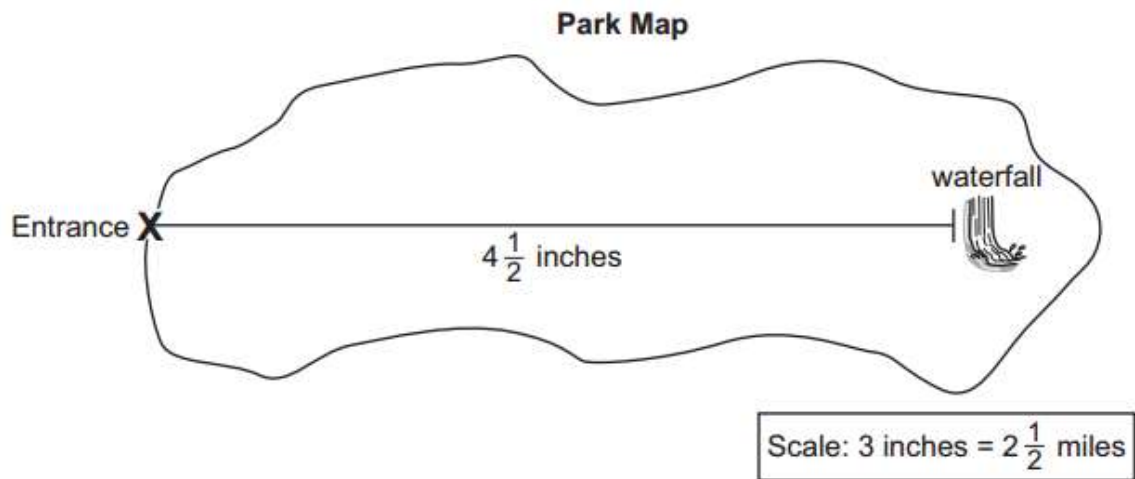
- A. \$9
- B. \$13
- C. \$15
- D. \$16

17. Divide.

$$-1\frac{1}{5} \div -1\frac{5}{6}$$

Show your work.

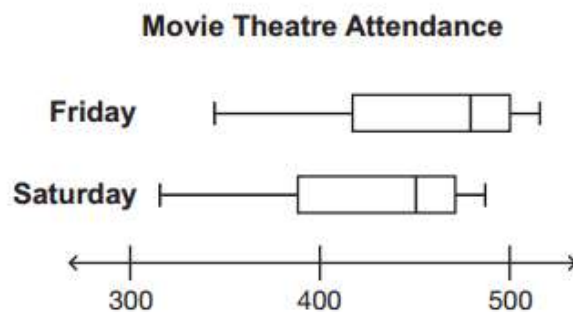
18. The distance on a map between the entrance of a park and a waterfall inside the park is $4\frac{1}{2}$ inches.



What is the actual distance from the entrance of the park to the waterfall?

Show your work.

19. A movie theater kept track of the attendance on Fridays and Saturdays. The results are shown in the box plots below.



Which conclusion can be drawn from the box plots?

- A. The attendance on Friday and the attendance on Saturday have the same median and interquartile range.
- B. The attendance on Friday has a greater median and a greater interquartile range than attendance on Saturday.
- C. The attendance on Friday has a greater interquartile range than attendance on Saturday, but both data sets have the same median.
- D. The attendance on Friday has a greater median than attendance on Saturday, but both data sets have the same interquartile range.

20.

$$(2t - 8) - \frac{1}{2}(9 - 4t) + \frac{5}{2}$$

Which expression is equivalent to the one shown?

- A. $-2t - 1$
- B. $-2t - 10$
- C. $4t - 1$
- D. $4t - 10$

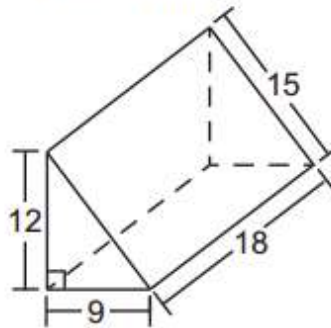
21. Loren made 20 ounces of a snack mix that was $\frac{2}{5}$ peanuts, 25% raisins, and 4 ounces of chocolate chips. The rest was granola. How many ounces of granola were in Loren's snack mix?

- A. 3 ounces
- B. 5 ounces
- C. 6 ounces
- D. 15 ounces

22. Amy knits $\frac{1}{10}$ of a scarf in $\frac{4}{5}$ of an hour. What fraction of a scarf can Amy knit in 1 hour?

- A. $\frac{1}{5}$ of a scarf
- B. $\frac{1}{8}$ of a scarf
- C. $\frac{9}{10}$ of a scarf
- D. $\frac{2}{25}$ of a scarf

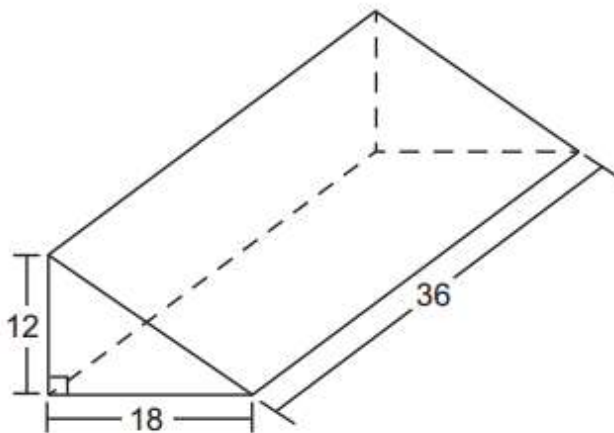
Use the diagram below to answer the question.



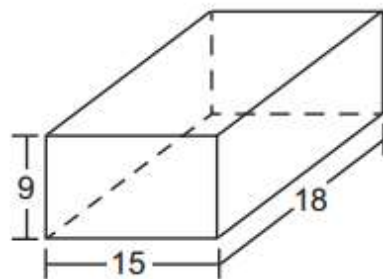
23.

Which solid figure has exactly twice the volume, in cubic units, as the solid figure shown above?

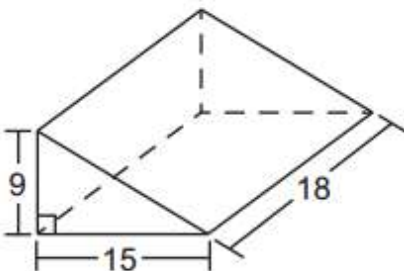
A.



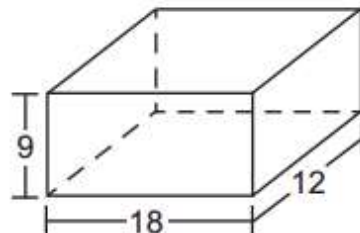
C.



B.



D.



24. In a school with only sixth and seventh graders, $\frac{4}{5}$ of the 200 students are seventh graders.

A. How many students in the school are seventh graders?

B. Describe two different ways to determine how many students in the school are sixth graders.

C. Of the seventh graders, 30% are in the band. If the band has the same number of sixth graders as seventh graders, what percentage of the sixth graders are in the band? Explain how you found your answer.