

Spring Break Homework Packet 2014 Math 6

Name: _____ Date: _____ Per: _____

1. What number is another way to represent $\frac{9}{15}$? Don't guess. Show how you found your answer.

A) 48%
B) 0.6
C) 0.18
D) $\frac{3}{4}$

2. Oliver wants to buy his sister a birthday gift. He picks out a really pretty pair of earrings that cost \$27.00. When he goes to pay for them, his total bill is more than \$27.00 because he forgot that tax is 9% of the price. What was the total bill for the cost of the earrings *and* tax?

Show your work:

A) \$36.00
B) \$24.00
C) \$29.43
D) 27.09

3. If $a = 4.3$ and $b = .25$

What is the value of the expression $4(a \div b)$

A) 117.2
B) 68.8
C) 17.2
D) 68.2

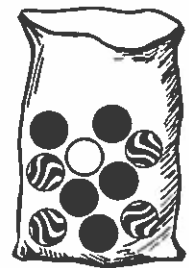
- 4.

If a number is chosen at random from this list what is the probability of it being an odd number? $p(\text{odd}) =$
1, 13, 6, 23, 11, 12, 9, 21

A) $\frac{3}{8}$
B) 25%
C) 6%
D) $\frac{3}{4}$

5.

Ericka pulled a marble out of this bag of marbles 25 times. Her results are listed in the table below.



BLACK	WHITE	WAVY

What is Ericka's *experimental* probability of picking a black marble?

- | |
|-------------------|
| A) 44% |
| B) $\frac{1}{2}$ |
| C) 40% |
| D) $\frac{8}{25}$ |

6.

On a road trip, Mika and her mother noticed a sign showing it was 128 miles to Rockville. It took them 3.2 hours to finish the trip to Rockville. What rate in miles per hour were they traveling?

Mika and her mother drove _____ miles per hour.

7.

Jorge has a window washing business. He charges \$10 to go to a home and \$3 for each window that he washes.

Let c = costs and n = number of windows.

Which equation would give the cost for a house with any number of windows?

- A. $c = 10 + 3n$
- B. $c = 10n + 3$
- C. $c = 3n$
- D. $c = n(10 + 3)$

8.

Place these three numbers in order from least to greatest.

$$\frac{2}{7} \quad 0.558 \quad \frac{4}{6}$$

A. $\frac{2}{7} \quad 0.558 \quad \frac{4}{6}$

B. $0.558 \quad \frac{2}{7} \quad \frac{4}{6}$

C. $0.558 \quad \frac{4}{6} \quad \frac{2}{7}$

D. $\frac{2}{7} \quad \frac{4}{6} \quad 0.558$

9.

Solve the following division problem.

$$12.345 \div 100$$

10.

If you multiply 5.2 by a number between 0 and 1, what can you predict about your number

- A. It will be more than 5.2
- B. It will be less than zero.
- C. It will be between zero and 5.2
- D. It will be zero also.

11.

Oranges are \$0.60 per pound. How much would it cost to buy 2.3 pounds of oranges?

It would cost \$ _____ for 2.3 pounds

12.

Araya made a circle in the snow. The circle had a radius of 5 meters.

What is the area of the circle she made in the snow?

$$\text{Area of circle} = \pi r^2$$

- A. 15.7 m²
- B. 25.0 m²
- C. 75.0 m²
- D. 78.5 m²

13.

Zane and his friends are driving down the west coast at an average speed of 55 miles per hour. Write an equation to show how many miles m they would travel in n hours.

Use your equation to find out how many hours it would take to drive 220 miles.

It would take them _____ hours to drive 220 miles.

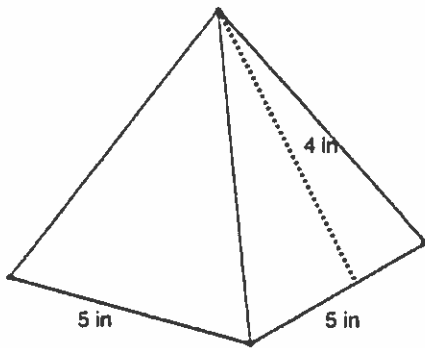
14.

3, -4, -12, -7, -1

Which of the following choices shows these numbers in order from lowest to highest?

- A) 3, -4, -12, -7, -1
- B) -1, -4, -12, -7, 3
- C) -12, -7, -4, -1, 3
- D) 3, -1, -4, -7, -12

15. Find the surface area of the square based pyramid below.



_____ in²

16.

Dillon earned a total of \$48.00 last week washing dishes - including \$6.00 in tips. He washed dishes 3 days last week.

if d = Dillon's daily pay we could express his earnings with this equation:

$$3 \cdot d + 6 = 48$$

How much was Dillon's daily pay?

Dillon's daily pay was \$ _____

17.

Mrs. Hattori bought weekly lunch tickets for each of her **three** children. Weekly lunch tickets cost \$7.50 each.

One week, Mrs. Hattori paid for the lunch tickets with a fifty-dollar bill.

What is the correct change she should receive from the fifty-dollar bill?

- A. \$42.50
- B. \$38.50
- C. \$32.50
- D. \$27.50

20.

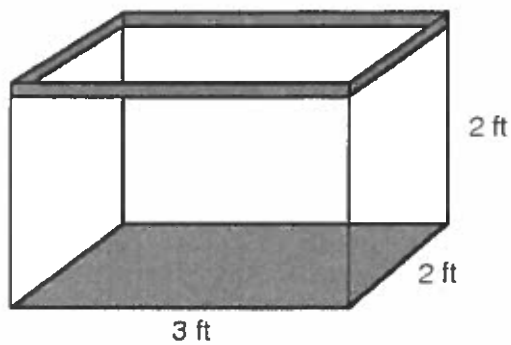
When Wanda went to summer camp, she took \$50.00 spending money that she had earned doing yard work. She purchased a camp T-shirt for \$16.00

What percent of Wanda's original amount does she have left?

- A. 16%
- B. 32%
- C. 68%
- D. 34%

21.

Miss Baker bought a fish tank for her class.



What is the volume of water the fish tank will hold when filled to the top?

- A. 6 cubic feet
- B. 7 cubic feet
- C. 12 cubic feet
- D. 24 cubic feet

24.

Gunnar put a fence around a rectangular area that was 6 feet by 12 feet. The fence cost \$1.50 for each foot.

What was the total cost of the fence?

- A. \$27.00
- B. \$36.00
- C. \$54.00
- D. \$108.00

25.

Iggy the class lizard lost his tail. The class found that Iggy's tail grows $\frac{1}{4}$ inch each week.

How many weeks will it take for Iggy's tail to grow 5 inches?

Show your work using words, numbers, and / or pictures.

It will take _____ weeks for Iggy's tail to grow 5 inches.

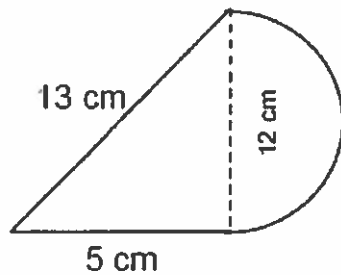
26.

There are 30 students in Ms. Keusch's homeroom. Of the students, 40% are boys. How many boys are in her homeroom?

- A) 40
- B) 12
- C) 18
- D) 1.2

27.

The figure is made up of a triangle and a semicircle.



Which measurement is closest to the perimeter of the figure?

- A) 30 centimeters
- B) 37 centimeters
- C) 56 centimeters
- D) 87 centimeters

28.

In a survey, Sharon, the team manager, asked the 120 soccer players in the league which drink they preferred during and after the game.

Drink	During Game	After Game
Gatorade	70	10
Ocean Spray	10	80
Water	40	30

What is the **ratio** comparing Gatorade to Ocean Spray **during** the game.

- A) 10 : 70
- B) 70 : 10
- C) 40 : 70
- D) 70 : 120

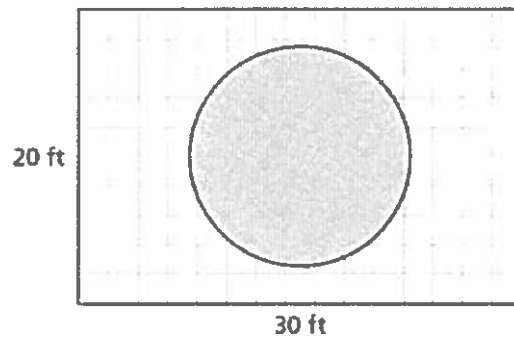
29.

A certain machine produces 3,000 nails in 4 minutes. How many nails per minute does the machine produce?

- A. 12,000 nails per minute
- B. 750 nails per minute
- C. 75 nails per minute
- D. $\frac{1}{750}$ nails per minute

30.

The Nevins want to install a circular pool with a 15-foot diameter in their rectangular patio. How many feet of plastic tubing are needed to fit around the edge of the pool?



- A) 15 feet
- B) 47.1 feet
- C) 93.2 feet
- D) 225 feet

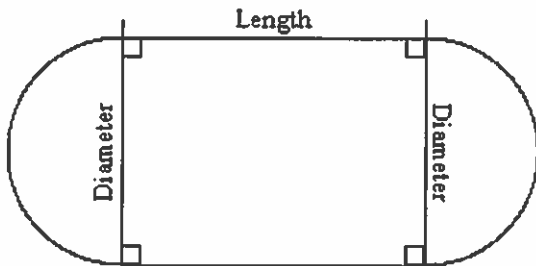
31. How many triangles and rectangles does a triangular prism have?

- A. 3 triangles and 2 rectangles
- B. 2 triangles and 3 rectangles
- C. 3 triangles and 1 rectangle
- D. 2 triangles and 1 rectangle

32.

A field needs new grass. The rectangular part of the field is 95 yards long and the diameter of each semicircle is 50 yards. Find the area of the field to determine how much grass is needed.

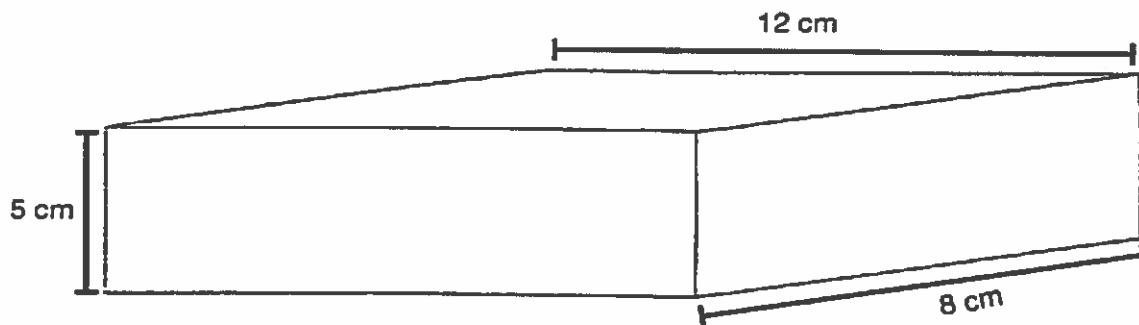
Use 3.14 for π .



The field will need _____ yd^2 of grass.

33.

Ms. Parker gave her students this picture of a rectangular prism.



What is the surface area of this rectangular prism? Show your work.

The surface area of this rectangular prism is _____ cm^2