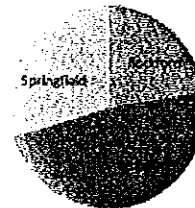


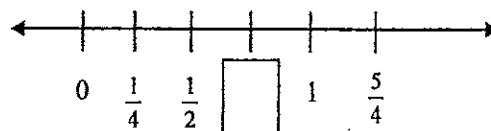
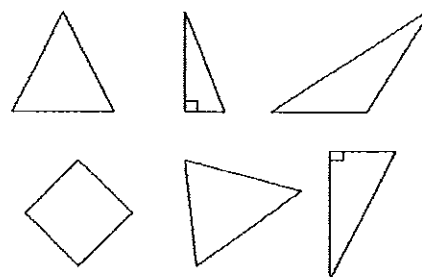
ICTM 4th Grade Mathematics Contest
(2013 - 2014) - Individual (#1)

- John would like to buy five apps for his I-Pod. Two of them cost \$0.99 each, two of them cost \$1.99 each, and one costs \$3.99. How much money will John need to buy all five apps?
- The pie chart on the right compares the amount of snowfall for Springfield, Rockford, and O'Hare during January 2013. Which location had the least amount of snowfall?
- Which digit is in the ten thousands place?
6,845,107
- 42 books need to be moved from the library to a classroom. Davey, Peter, and Mickey have offered to help move the books. How many books should each student move so that they each move an equal amount?

Snowfall - January 2013



- What fraction of the figures are right triangles?
- Katie is at the candy store where she notices that candy costs \$2.00 for every $\frac{3}{4}$ of a pound. She only has \$2.00 to spend. When the clerk weighs her bag of candy, the scale indicates a weight of 0.8 pounds. Her bag of candy weighs too much. What fraction of a pound has she gone over her limit?
- Determine the *sum* of the composite numbers in the following list:
2, 8, 23, 32, 51, 79, 85, 91
- Find the missing value in the number line.



ICTM 4th Grade Mathematics Contest
(2013 - 2014) - Individual Solutions (#1)

1. $2 \times \$1.99 = \1.98
 $2 \times \$1.99 = \3.98 $\$1.98 + \$3.98 + \$3.99 =$ \$9.95

2. Rockford

3. 4

4. $42 \div 3 =$ 14 books

5. $\frac{2}{6} =$ $\frac{1}{3}$

6. $\frac{3}{4} = 0.75$
$$\begin{array}{r} 0.80 \\ - 0.75 \\ \hline 0.05 \end{array}$$
 $0.05 = \frac{5}{100} =$ $\frac{1}{20}$

7. Composite numbers can be written as the product of two numbers other than 1 and itself.

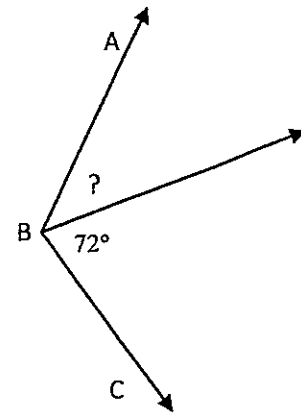
$8 + 32 + 51 + 85 + 91 =$ 267

8. $\frac{3}{4}$

ICTM 4th Grade Mathematics Contest
(2013 - 2014) - Team (#1)

1. Emily's mom is going to make curtains for her three windows. Two windows are four feet wide and one window is three feet wide. Determine how much fabric is needed to cover the widths of all three windows in inches.

2. If the measure of angle ABC is 100° , find the measure of the missing angle.



3. Nate has 28 books. He decides to buy six more books each month to add to his collection. How many total books will he have in his collection after eight months?

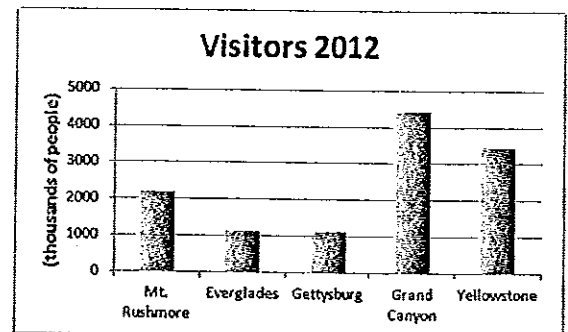
4. If $\frac{9}{x} = \frac{3}{4} = \frac{y}{24}$, then find the value of $x + y$.

5. Round the following sum to the hundreds place.

$$6,215 + 12,809 + 3,988 + 763$$

6. Zachary has \$9.75 in quarters. He has one-third as many nickels as quarters. Determine the amount of money he has in nickels.

7. The chart indicates the number of visitors to each of the national parks in 2012. There were over 4,000,000 visitors to the Grand Canyon. Approximately how many visitors were there to Mt. Rushmore?



8. Adam can run one mile in 8 minutes. How many feet can he run in 6 minutes?

9. Determine $a+b+c$ if:
- $$\begin{array}{r} 53c \\ -2b6 \\ \hline a45 \end{array}$$

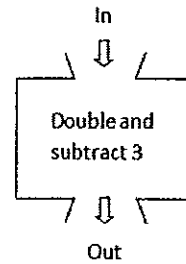
10. Joe would like to make a dinner that has one meat, one vegetable, and one dessert. He has two types of meat in the freezer, five different vegetables, and three desserts. How many different meals can Joe prepare?

ICTM 4th Grade Mathematics Contest
(2013 - 2014) - Team (#1)

11. A farmer is fencing in a 60-foot by 78-foot barnyard. He needs to place the fence posts six feet apart. How many fence posts does he need?

12. What is the value of q if $p+19=35$ and $q-p=7$?

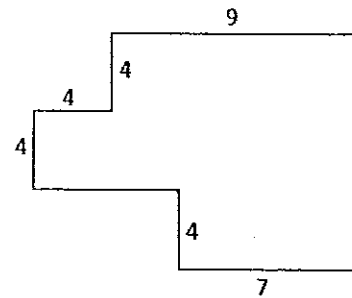
13. If 13 came out, what number went in?



14. Luke needs mulch to cover an area in front of his house with dimensions 12 feet by 5 feet. If one bag of mulch will cover 16 square feet, how many bags of mulch will Luke need?

15. If one load of laundry requires $\frac{3}{4}$ cup of detergent, how many cups of detergent are needed for fourteen loads of laundry?

16. Determine the perimeter of the figure shown.

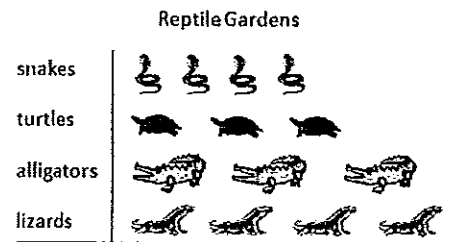


17. One pound of cheese costs \$3.96 at the deli counter.

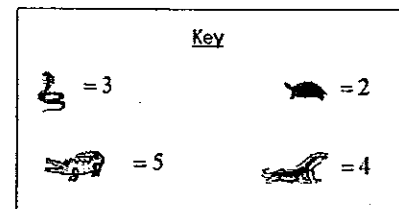
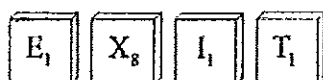
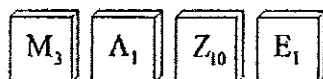
How much would $\frac{3}{4}$ pound of cheese cost?

18. Seven Oreo cookies arranged in a line are as long as 2 calculators arranged in a line. Four calculators are as long as 12 sticky notes. How many Oreos are as long as 12 sticky notes?

19. According to the chart, Reptile Gardens has 15 alligators. How many more lizards are there than turtles?



20. Isabelle played the word "MAZE" in a board game. Susan played the word "EXIT". How many more points did Isabelle score than Susan?



ICTM 4th Grade Mathematics Contest
(2013 - 2014) - Team Solutions (#1)

1. $4 + 4 + 3 = 11$
 $11 \text{ feet} \times 12 = 132 \text{ inches}$
2. $100^\circ - 72^\circ = 28^\circ$
3. $28 + 8 \times 6 = 76$
4. $x = 12$, $y = 18$, $x + y = 30$
5. $6,215 + 12,809 + 3,988 + 763 = 23775$
Rounded to the hundreds place: $23,800$
6. $\$9.75 \div \$8.25 = 39 \text{ quarters}$, $\frac{1}{3} \times 39 = 13 \text{ nickels}$, $13 \times \$0.05 = \0.65
7. over 2,000,000 visitors
8. 1 mile = 5280 feet, $\frac{5280 \text{ feet}}{8 \text{ minutes}} = \frac{660 \text{ feet}}{1 \text{ minute}}$, $660 \times 6 \text{ minutes} = 3960 \text{ feet}$
9. $a = 2$, $b = 8$, $c = 1$, $a + b + c = 11$
10. $2 \times 5 \times 3 = 30$
11. $78 \div 6 = 13$, $60 \div 6 = 10$. There are 13 posts on the long side and 10 posts on the short side. But each side shares a corner post, therefore the total number is $10 + 11 + 10 + 11 = 42$
12. $p = 16$, $q - 16 = 7$, $q = 23$
13. $13 + 3 = 16$, $16 \div 2 = 8$
14. $12 \times 5 = 60 \text{ square feet}$, $60 \div 16 = 3\frac{3}{4}$, 4 bags of mulch
15. $\frac{3}{4} \times 14 = 10\frac{1}{2} \text{ cups}$
16. $9 + 4 + 4 + 4 + 6 + 4 + 7 + 12 = 50$
17. $\frac{3}{4} \times \$3.96 = \2.97
18. 7 Oreos = 2 calculators, 4 calculators = 12 notes, 12 notes = 2 x 7 Oreos = 14 Oreos
19. $16 - 6 = 10$
20. $15 - 11 = 4$