

Answer Sheet

Family Vacation Multiplication

The Smiths are going on a family vacation. Use multiplication, addition, and subtraction to solve the following problems. Perform other operations as needed to help find the answers. Show your work.

Driving to the airport, the Smiths needed to fill up on gasoline. Gasoline costs 3 dollars for one gallon. If their tank holds 16 gallons, and they already have 3 gallons filled, how much money will it cost to fill the car's tank completely?

$$(16 \text{ gallons} - 3 \text{ gallons}) = 13 \text{ gallons}$$
$$13 \times \$3 \text{ per gallon} = \$39$$

It cost \$39 to fill the tank completely.

The Smiths want to visit a museum and must pay to park. They are going to be gone for 4 hours. The price of parking is as follows:

- 1 Quarter = 15 minutes
- 1 Dime = 5 minutes
- 1 Nickel = 2 minutes

The Smiths have 8 quarters, 12 dimes and 14 nickels. Do they have enough to park for 4 hours? (Remember: 60 minutes = 1 hour)

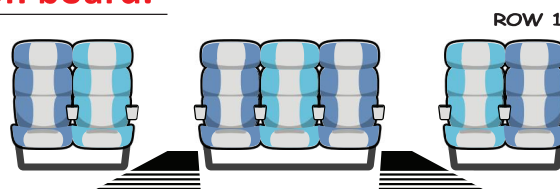
$$15 \text{ min.} \times 8 \text{ quarters} = 120 \text{ min.}$$
$$5 \text{ min.} \times 12 \text{ dimes} = 60 \text{ min.}$$
$$2 \text{ min.} \times 14 \text{ nickels} = 28 \text{ min.}$$
$$120 + 60 + 28 = 208 \text{ min.} = 3 \text{ hours} \& 28 \text{ min.}$$

The Smiths do not have enough money to park for 4 hours.

The Smiths board the airplane to head back home. The flight attendant wants to count how many passengers are on board. Every row consists of 2, 3, and 2 seats each (see picture below). If there are 51 horizontal rows, and 13 seats are empty, how many passengers are on board?

$$51 \text{ rows} \times 7 \text{ seats} = 357 \text{ seats total}$$
$$357 - 13 = 344$$

There are 344 passengers on board.



In total, the Smiths were flying in an airplane for 14 hours. If the airplane cruises at approximately 512 miles per hour, about how many miles did they travel all together?

$$14 \text{ hours} \times 512 \text{ miles} = 7,168$$

They traveled 7,168 miles.



Answer Sheet

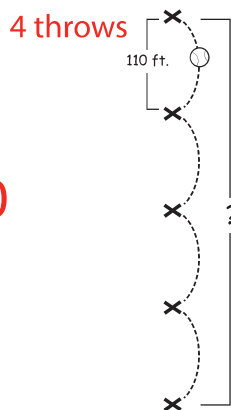
Athletic Arithmetic: Multiplication word problems

Answer Sheet

4th Grade

Practice your multiplication skills by answering the following word problems. Show your work.

The Springfield Giants are practicing their relay throws. If there are 5 people in the relay and 110 feet between them, how far does the ball travel when it reaches the last player? Think about the number of throws it takes to make it to the end of the relay.



$$110 \times 4 = 440$$

440 feet

A football field is 100 yards long and 50 yards wide. What is the entire area of the field? If the end zone extends 10 yards beyond each goal line. What is the entire area including both end zones? Remember, Area = Length \times Width.

$$100 \times 50 = 5000 \text{ square yards}$$

The area of the field is 5,000 square yards.

$$100 + 10 + 10 = 120$$

$$120 \times 50 = 6000 \text{ square yards}$$

The area of the field including both end zones is 6,000 square yards.

The Ladybugs basketball just finished another close game. They scored 12 3-point baskets, 17 2-point baskets, and 8 1-point baskets. If the other team scored 75 points, did the Ladybugs score enough to win?

$$12 \times 3 = 36$$

$$17 \times 2 = 34$$

$$8 \times 1 = 8$$

$$36 + 34 + 8 = 78$$

Yes

Casey is practicing her bowling technique. She rolled 14 attempts. In 4 of them she knocked down 8 pins, in 3 she knocked down 9, and she knocked down all 10 in the rest. How many pins did she knock down in total?

$$4 \times 8 = 32$$

$$4 + 3 = 7$$

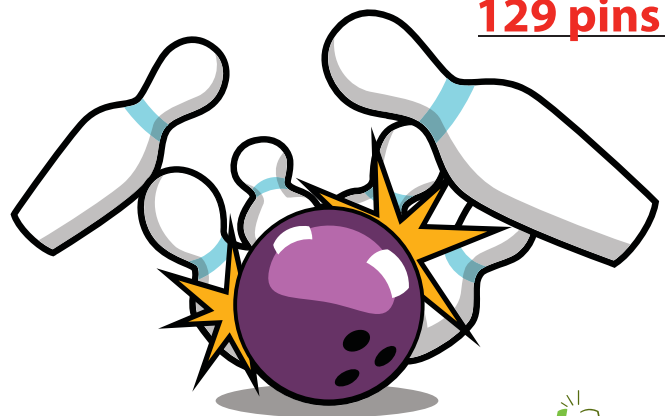
$$14 - 7 = 7$$

$$3 \times 9 = 27$$

$$7 \times 10 = 70$$

$$32 + 27 + 70 = 129$$

129 pins



Answer Sheet

Heads or Tails?

Complete the exercise below to find the probability that these coins will land heads or tails.



ANSWERS

Write out the different combinations of heads and tails if all three coins are tossed at once. Then answer the questions.

Remember: Probability is the likelihood an event will occur expressed as a fraction.

	Whale	Pig	Eagle
1	<u>Heads</u>	<u>Heads</u>	<u>Heads</u>
2	<u>Tails</u>	<u>Heads</u>	<u>Heads</u>
3	<u>Tails</u>	<u>Tails</u>	<u>Heads</u>
4	<u>Tails</u>	<u>Tails</u>	<u>Tails</u>
5	<u>Heads</u>	<u>Tails</u>	<u>Tails</u>
6	<u>Heads</u>	<u>Heads</u>	<u>Tails</u>
7	<u>Heads</u>	<u>Tails</u>	<u>Heads</u>
8	<u>Tails</u>	<u>Heads</u>	<u>Tails</u>

- What is the probability that two of the coins will land heads?

3/8

- What is the probability that at least one coin lands tails up?

7/8

- What is the probability that the whale coin lands heads up?

4/8

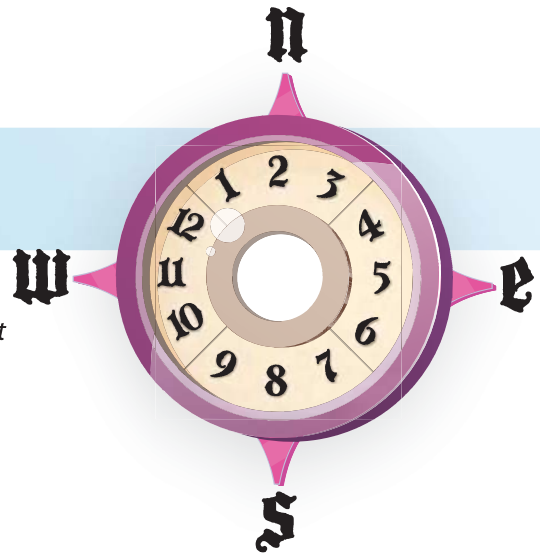
- What is the probability that the whale lands heads, the pig coin lands tails, and the eagle coin lands heads?

1/8

Answer Sheet

M A T H ✂✂
FRACTIONS ✂✂

Steer & Simplify #3



Navigate the treacherous seas by simplifying the following fractions. Use the compass on the right to guide you. Start at the red arrow and go north, south, east or west to the next square with each fraction you reduce. Draw a line to track your journey. Show your work.

Compass Instructions: Once you reduce a fraction completely, look at its denominator and then find that number on the compass and move in the direction it points.

$\frac{15}{40} = \frac{3}{8}$	$\frac{27}{90} = \frac{3}{10}$	$\frac{5}{60} = \frac{1}{12}$	$\frac{12}{42} \xrightarrow{+6} \frac{2}{7} \xrightarrow{+6}$
↓	←	←	↓
$\frac{12}{30} = \frac{2}{5}$	$\frac{27}{63} = \frac{3}{7}$	$\frac{8}{16} = \frac{1}{2}$	$\frac{7}{63} = \frac{1}{9}$
→	↓	↑	↓
$\frac{2}{16} = \frac{1}{8}$	$\frac{30}{55} = \frac{6}{11}$	$\frac{7}{14} = \frac{1}{2}$	$\frac{15}{24} = \frac{5}{8}$
↓	←	↑	↓
$\frac{11}{55} = \frac{1}{5}$	$\frac{12}{54} = \frac{2}{9}$	$\frac{8}{12} = \frac{2}{3}$	$\frac{49}{70} = \frac{7}{10}$
→	↓	↑	←

Answer Sheet

MULTIPLICATION WORD PROBLEMS

1. Bennet saves \$.75 from his lunch money everyday. If he saves for 12 weeks how much money will he have?

$$0.75(\text{amount saved per week}) \times 12(\text{\#of weeks}) = \$9$$

If Bennet saves for 12 weeks he will have \$9.

2. Mr. Hansen buys a cupcake for each student in his class for the class party. Each cupcake costs \$1.25. However there is a discount where each batch of 10 cupcakes are only \$1. He buys 34 cupcakes. How much did Mr. Hanson pay for all 34 cupcakes?

30 cupcakes will be in the discount price of \$1

4 cupcakes will be at the standard price of \$1.25

$$30(\text{discount cupcakes}) \times \$1(\text{discount cost per cupcake}) = \$30$$

$$4(\text{regular cupcakes}) \times \$1.25(\text{regular cost per cupcake}) = \$5$$

$$\$30(\text{total cost of discount cupcakes}) + \$5(\text{total cost of regular cupcakes}) = \$35$$

Mr. Hanson paid \$35 for all 34 cupcakes.

3. Emi buys 15 baskets of strawberries to share with her class. Each basket has 12 strawberries. How many strawberries does she have to share with the class?

$$15(\text{\#of strawberry baskets}) \times 12(\text{\#of strawberries per basket}) = 180$$

Emi has 180 strawberries to share with the class.

Each basket costs \$ 2.25. How much did Emi spend on strawberries?

$$15(\text{\#of strawberry baskets}) \times \$2.25(\text{cost per basket}) = 33.75$$

Emi spent \$33.75 on strawberries.

4. Timothy mows his neighbor's lawn for \$6.50 per week. He continues to do this for 37 weeks until winter. In winter he shovels snow off their lawn for \$10.25 per week for 25 weeks. How much money did Timothy earn in total?

$$\$6.50(\text{cost per week for mowing}) \times 37(\text{\#of weeks of mowing}) = \$240.50$$

$$\$10.25(\text{cost per week for shoveling}) \times 25(\text{\#of weeks of shoveling}) = \$256.25$$

$$\$240.50(\text{total cost of mowing}) + \$256.25(\text{total cost of shoveling}) = \$496.75$$

Timothy earned a total of \$496.75.

5. Clara buys a cake(\$25), 25 cupcakes (\$.75/ea) and 42 cookies (\$.50/ea) for her birthday party. How much did Clara spend for all these desserts?

$$25(\text{\#of cupcakes}) \times \$0.75(\text{cost per cupcake}) = \$18.75$$

$$42(\text{\#of cookies}) \times \$0.50(\text{cost of cookies}) = \$21$$

$$\$25(\text{cost of 1 cake}) + \$18.75(\text{cost of 25 cupcakes}) + \$21(\text{cost of 42 cookies}) = \$64.75$$

Clara spent \$64.75 for all these desserts.

Answer Sheet





Answer Sheet


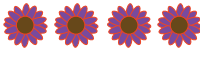




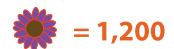
Flower Nursery: Reading a Pictograph

These two pictographs are comparing two types of flowers imported from Europe. Answer the questions below using information from the pictographs.

Note: each tulip in the pictograph stands for 1,000 tulips. Each daisy in the pictograph stands for 1,200 daisies.

Country	Number of Tulips Imported
Holland	
France	
Denmark	
Italy	

Country	Number of Daisies Imported
Holland	
France	
Denmark	
Italy	



Questions:

1. How many tulips did Holland and France import?

Answer: 7,000 + 7,000 = 14,000 tulips

$$\begin{array}{r} 1,000 \\ \times 7 \\ \hline 7,000 \end{array} \quad \begin{array}{r} 1,000 \\ \times 7 \\ \hline 7,000 \end{array}$$

2. How many daisies did Holland and Italy import?

Answer: 6,000 + 6,000 = 12,000 daisies


$$\begin{array}{r} 1,200 \\ \times 5 \\ \hline 6,000 \end{array} \quad \begin{array}{r} 1,200 \\ \times 5 \\ \hline 6,000 \end{array}$$

3. What country imported the same amount of tulips and daisies?

Answer: Italy (6,000 tulips and 6,000 daisies)

4. Write the countries that imported the most flowers to the least flowers, in order.

1. **Holland:** 7,000 + 6,000 = 13,000 2. **Italy:** 6,000 + 6,000 = 12,000 3. **France:** 7,000 + 4,800 = 11,800
 Answer: _____ 4. **Denmark:** 8,000 + 3,600 = 11,600

5. If Denmark wants to import 3,000 more daisies, how many  would you draw in the table above?

Answer: 

Answer Sheet

Bird Probability

Answer the probability questions regarding the birds hanging out.

1. Based on the number of birds, which bird is most likely to fly away first?

The green bird

2. Which bird is the least likely to fly away?

The blue bird

3. What is the probability of a yellow bird flying away?

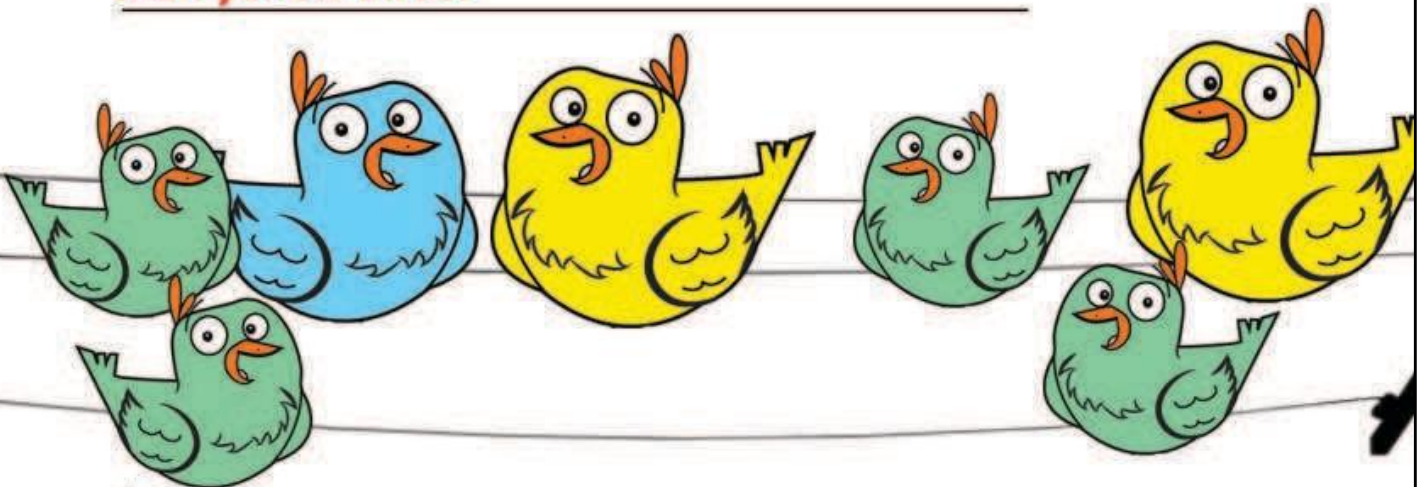
2 out of 7

4. What are the chances that a green bird will fly away?

4 out of 7

5. Would it be more likely for a green or yellow bird to fly away first? Explain your answer.

A green bird. There are more green birds than yellow birds.







Answer Sheet







Answer Sheet Sport Fans! Reading a Pictograph

These two pictographs are comparing numbers of balls kicked and thrown on the field. Look at the information and answer the questions below.

Note: each  in the pictograph stands for 600 of them and each  in the pictograph stands for 800 of them.

Match	Number of Balls Kicked
Match A	
Match B	
Match C	
Match D	

Match	Number of Balls Thrown
Match A	
Match B	
Match C	
Match D	

 = 600  = 800

Questions:

1. What do you think this symbol  represents?

Answer: 300 balls kicked

2. What do you think this symbol  represents?

Answer: 400 balls thrown

3. What match had the same amount of balls kicked and thrown?

Answer: Match C (with 3,600 balls kicked and thrown)

4. In total did more balls get kicked or thrown in all the matches?

Answer: Thrown (with 12,900 total)

Kicked	Thrown
3,000	2,800
2,400	4,000
3,600	3,600
+ 2,700	+ 3,200
<u>11,700</u>	<u>13,600</u>

5. Write in order the matches which have the most to the least balls kicked and thrown.

Answer: _____

Match C: $3,600 + 3,600 = 7,200$

Match B: $2,400 + 4,000 = 6,400$

Match D: $2,700 + 3,200 = 5,900$

Match A: $3,000 + 2,800 = 5,800$

Answer Sheet

Probability Quiz

Answer the questions below regarding each probability question.

1. In the word "BANANA", what is the letter that would most likely be picked at random?

The letter "A"

2. A box contains 9 red marbles, 12 blue marbles, 13 green marbles and 6 white marbles. What is the probability of taking out a red marble?

9 out of 40

3. If you chose a number at random below, what is the probability of picking an even number?

3, 12, 15, 9, 5, 14, 21, 17

2 out of 8

4. What is the probability of picking an odd number from the list of numbers below?

46, 44, 8, 22, 14, 12, 3, 7

2 out of 8

5. What is the probability of choosing the letter "O" in SCHOOL?

2 out of 5

6. There are 11 oranges, 6 apples, 9 bananas, and 13 peaches on the table. What is the probability of picking an orange?

11 out of 39
