Lesson 9-3 • Reinforce Understanding

Add Fractions with Unlike Denominators

Name _____

Review

You can make a table to help find the lowest common multiple for the denominator.

Consider $\frac{5}{12}+\frac{3}{8}$. It has denominators 12 and 8.

The first number that appears in both rows is 24. Make equivalent fractions with like denominators of 24.

	× 1	× 2	× 3	× 4
12	12	24	36	48
8	8	16	24	32

$\frac{5}{12}+\frac{3}{8}=\frac{19}{24}$

$\frac{5}{12}+\frac{3}{8}=\frac{5\times2}{12\times2}+\frac{3\times3}{8\times3}$

$=\frac{10}{24}+\frac{9}{24}$

$=\frac{19}{24}$

What is the sum? Use a table to find the lowest common multiple.

1. $\frac{5}{6}+\frac{2}{5}=$ _____
2. $\frac{2}{9}+\frac{3}{4}=$ _____
3. $\frac{2}{7}+\frac{1}{3}=$ _____
4. $\frac{3}{8}+\frac{1}{2}=$ _____
5. $\frac{3}{10}+\frac{5}{6}=$ _____
6. $\frac{5}{6}+\frac{4}{15}=$ _____
7. $\frac{7}{12}+\frac{5}{8}=$ _____
8. $\frac{2}{11}+\frac{1}{4}=$ _____

Lesson 9-2 • Reinforce Understanding

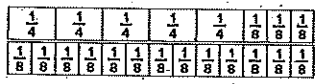
Represent Addition of Fractions with Unlike Denominators

Name _____

Review

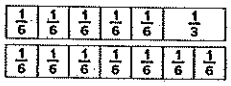
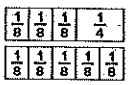
Consider $\frac{5}{4}+\frac{3}{8}$. Use fraction tiles to solve.

You can use equivalent fractions to write fractions with like denominators.



Therefore, $\frac{5}{4}+\frac{3}{8}=\frac{13}{8}$.

What equation do the fraction tiles represent? Write the equation and solve.

1. 
2. 

Solve the equation using fraction tiles.

3. $\frac{4}{5}+\frac{3}{10}=$ _____
4. $\frac{1}{4}+\frac{5}{12}=$ _____
5. $\frac{5}{9}+\frac{2}{3}=$ _____
6. $\frac{7}{8}+\frac{3}{4}=$ _____

Lesson 9-5 • Reinforce Understanding

Subtract Fractions with Unlike Denominators

Name _____

Review

You can make a table to help find a common multiple for the denominator.

Consider $\frac{5}{12}-\frac{3}{8}$. It has denominators 12 and 8.

The first number that appears in both rows is 24. Make equivalent fractions with like denominators of 24.

	× 1	× 2	× 3	× 4
12	12	24	36	48
8	8	16	24	32

$\frac{5}{12}-\frac{3}{8}=\frac{1}{24}$

$\frac{5}{12}-\frac{3}{8}=\frac{5\times2}{12\times2}-\frac{3\times3}{8\times3}$

$=\frac{10}{24}-\frac{9}{24}$

$=\frac{1}{24}$

What is the difference? Use a table to find a common multiple.

1. $\frac{5}{6}-\frac{1}{3}=$ _____
2. $\frac{11}{12}-\frac{3}{4}=$ _____
3. $\frac{6}{7}-\frac{2}{3}=$ _____
4. $\frac{5}{6}-\frac{5}{9}=$ _____
5. $\frac{2}{3}-\frac{5}{12}=$ _____
6. $\frac{4}{5}-\frac{1}{2}=$ _____
7. $\frac{9}{10}-\frac{1}{6}=$ _____
8. $\frac{5}{8}-\frac{2}{11}=$ _____

Lesson 9-4 • Reinforce Understanding

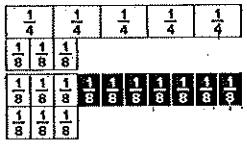
Represent Subtraction of Fractions with Unlike Denominators

Name _____

Review

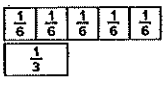
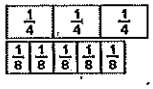
Consider $\frac{5}{4}-\frac{3}{8}$. Use fraction tiles to solve.

You can use equivalent fractions to write fractions with like denominators.



Therefore, $\frac{5}{4}-\frac{3}{8}=\frac{7}{8}$.

What difference equation do the fraction tiles represent. Write the equation with like denominators.

1. 
2. 

What is the difference? Use fraction tiles to help you subtract.

3. $\frac{3}{4}-\frac{7}{12}=$ _____
4. $\frac{4}{5}-\frac{3}{10}=$ _____
5. $\frac{5}{9}-\frac{1}{6}=$ _____
6. $\frac{7}{8}-\frac{3}{4}=$ _____

Chapter 17

Vocabulary

- Wryly -
- Fending -
- Hostile -
- Designed -
- Adventure -
- Heaved -
- Plump -

Questions

1. What were Doon's two choices if Lina didn't show up?
2. When Lina arrives what does she have with her?
3. How is bringing along a baby going to be an extra challenge for her?
4. How does Lina get Poppy down the ladder?
5. What did Lina think the paddles on the boat were for?
6. How did Doon and Lina use teamwork to figure out how to launch the boat?
7. What did it feel like when they got into the boat?

Chapter 18

Vocabulary

- Enormous -
- Shuddered -
- Thrashing -
- Shallow -
- Current -
- Boulder -
- Retrieving -

Questions

1. How were the travelers feeling as they took off in the boat
2. What were they able to see as they started their adventure?
3. What did Doon and Lina find was next as the boat hit shallow water?
4. What did Poppy find and start chewing on?
5. Why do you think they decide to read the book later?
6. What did Lina tell Mrs. Murdo before she left?
7. What does Lina find in her pocket?
8. Why is this important?

Chapter 19

Vocabulary

- Splotches -
- Trill -
- Cluster -
- Astonishing -
- Exhausted -
- Fragile -
- Crimson -

Questions

1. How long did the sign say they would have to climb?
2. What did they find when they got to the end of the tunnel?
3. What were the hundreds of tiny flecks of light in the sky that they saw?
4. What other things are they experiencing that they had never seen, heard, or felt before?
5. They don't see any civilization when they get above ground. What are some of their worries?
6. What do you think they are feeling about all these new experiences?
7. They were so excited about the environment around them what did they forget to look at?

Chapter 20

Vocabulary

- Ensure -
- Disaster -
- Chasm -
- Creature -
- Clearing -
- Gorgeous -
- Overlapping -

Questions

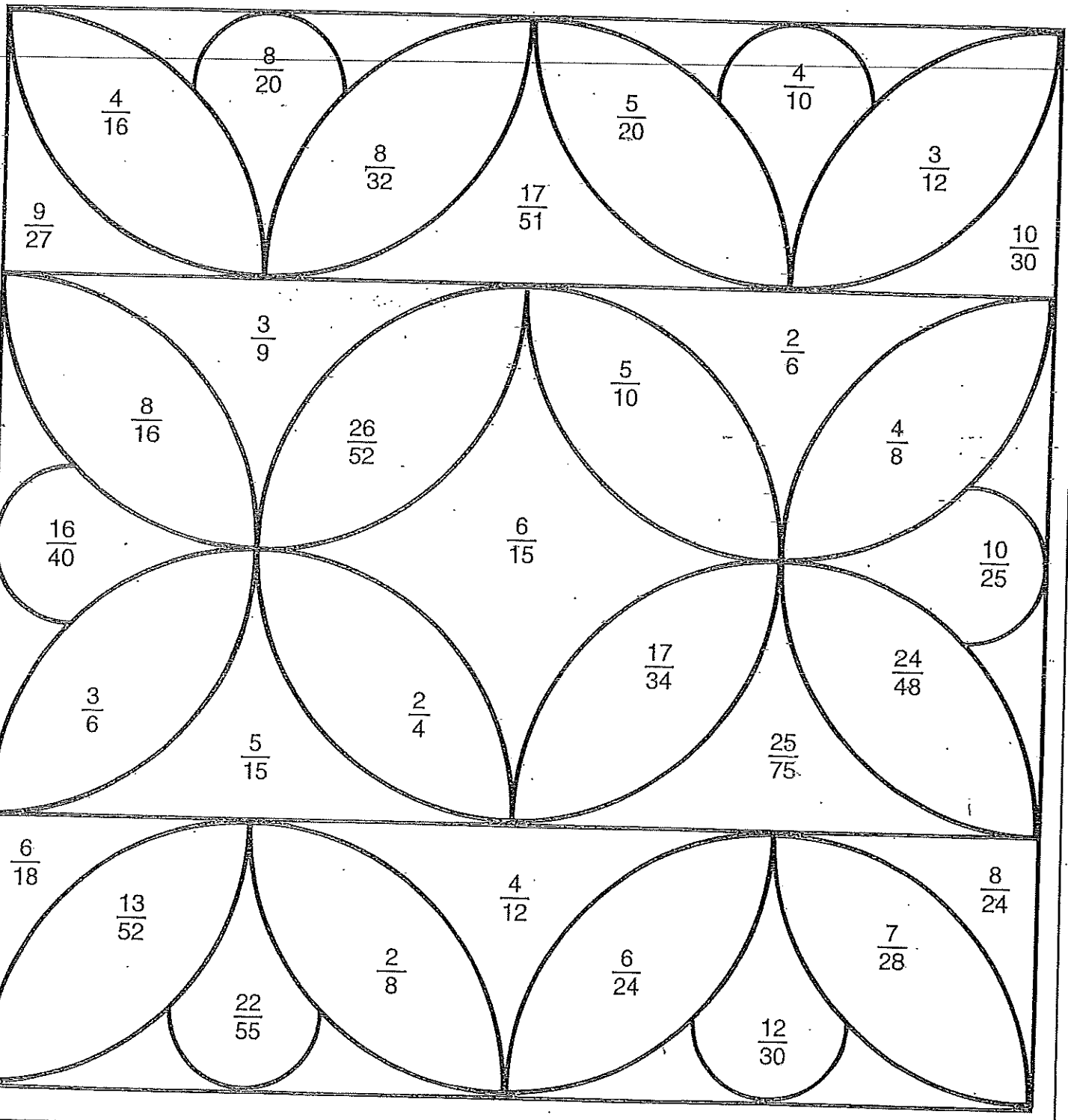
1. Who is writing this journal writing?
2. The author of the journal is packing up but is not allowed to bring what with them?
3. The City of Ember was a plan to save humankind from what?
4. How many people were joining in this plan? How many men and how many women?
5. What do Lina and Doon learn from this book?
6. What do you think the fruit is they found and are eating?
7. How did Lina and Doon get their message back to the city of Ember?
8. Who will find the message?
9. Predict what you think will happen when she finds the message.

Name _____

Stained Glass Window

Color each section equivalent to:

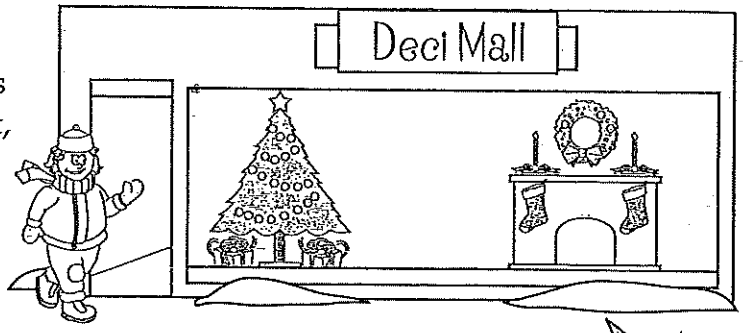
$\frac{1}{2}$ — green $\frac{1}{3}$ — blue $\frac{1}{4}$ — yellow $\frac{2}{5}$ — red



Name _____ Adding decimals

Deck the Halls!

Noelle is shopping for holiday decorations. At Deci Mall, prices are in decimals, not dollars and cents! To find out how much the items cost, add together the values of the letters that spell each one's name.



Example: B + E + L + L = 2.34 + 9.001 + 3.45 + 3.45 = 18.241

1. CANDLE = ____ + ____ + ____ + ____ + ____ + ____ = ____
2. TINSEL = ____ + ____ + ____ + ____ + ____ + ____ = ____
3. STAR = ____ + ____ + ____ + ____ = ____
4. GARLAND = ____ + ____ + ____ + ____ + ____ + ____ + ____ = ____
5. TREE = ____ + ____ + ____ + ____ = ____
6. BOWS = ____ + ____ + ____ + ____ = ____
7. CRECHE = ____ + ____ + ____ + ____ + ____ + ____ = ____
8. ANGEL = ____ + ____ + ____ + ____ + ____ = ____
9. RIBBON = ____ + ____ + ____ + ____ + ____ + ____ = ____
10. HOLLY = ____ + ____ + ____ + ____ + ____ = ____
11. LIGHTS = ____ + ____ + ____ + ____ + ____ + ____ = ____
12. WREATH = ____ + ____ + ____ + ____ + ____ + ____ = ____

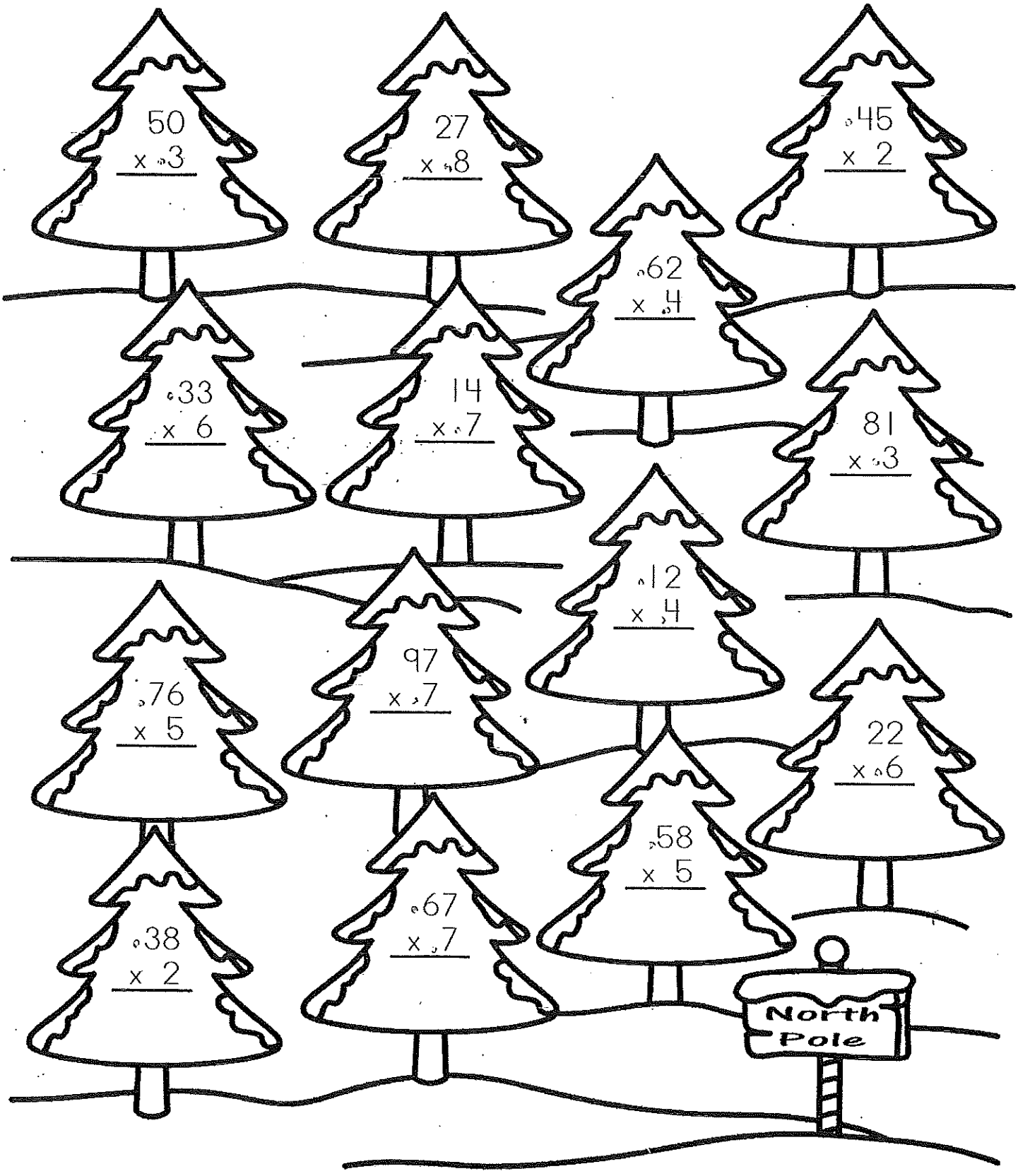
Letter Values

A = 0.1
E = 9.001
D = 7.8
H = 6.789
L = 3.45
N = 6.7
Y = 5.6
S = 4.005
B = 2.34
R = 10.23
C = 5.06
K = 0.19
G = 4.5
P = 0.706
I = 1.2
O = 8.09
T = 0.67
W = 2.034

Bonus Box : Which has a higher cost at the Deci Mall: a poinsettia or a stocking?

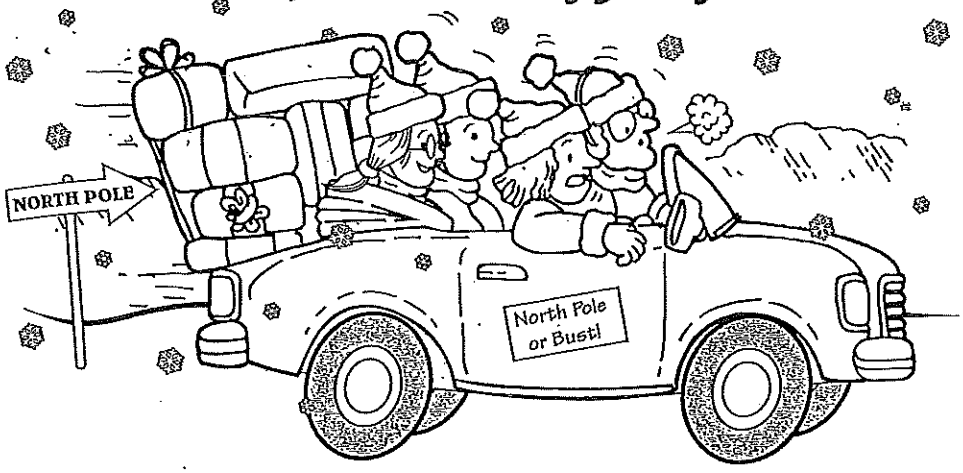
Name: _____

2-Digit by 1-Digit Multiplication



Name _____ Problem solving

A Hollyjolly Christmas



Mrs. Hollyjolly could not believe it. Mr. Hollyjolly had finally agreed to take his family on a dream vacation to the North Pole. Solve the problems below to find out more about the trip.

1. Mr. Hollyjolly bought his wife, son, daughter, and himself the following items: coats at $76.83 each, gloves at $6.24 a pair, boots at $35.21 a pair, and hats at $5.86 each. How much did the items cost? _____

2. The family needed new luggage. If each piece of luggage cost $117.27, how much did 4 pieces cost? _____

3. Mr. Hollyjolly bought 12 rolls of film for the trip. Each roll cost $1.37. How much was spent on film? _____

4. Mrs. Hollyjolly ordered a bale of hay for each of the 8 reindeer except Blitzen (he got 2!). If each bale cost $4.78, how much did the hay cost? _____

5. The Hollyjolly kids used 5 yards of gift wrap to wrap each bale of hay in problem 4. How many feet of gift wrap did they use? _____

6. How much did the gift wrap in problem 5 cost if it was $0.74 per foot? _____

7. It was 2,482 miles from the Hollyjolly home to the North Pole. The family traveled 573 miles the first day and 783 miles the second day. How far did they go? _____ How far were they from the North Pole? _____

8. At the North Pole, the family met some carolers. The carolers said they walked 4.5 miles each time they caroled. If the group caroled every night for 2 weeks, how many miles did it travel? _____

9. The elves said that Santa received 22,032 letters on Monday; 32,747 on Tuesday; 42,573 on Wednesday; 52,316 on Thursday; and 63,197 on Friday. How many letters did he receive in all? _____ What was the average number of letters received each day? _____

10. If each letter in problem 9 had a $0.37 stamp on it, how much did it cost to mail the letters? _____

Bonus Box: The family noticed that each strand of cranberries on Santa's tree had 3 cranberries per inch. If the strands' total length was 42 feet, how many cranberries were used?

Note to the teacher: If desired, allow students to use calculators when completing this page.