Name: _____ Date: _____

EVERYDAY MATHEMATICS—4th Grade
Unit 8 Review: Fraction Operations; Applications

1) Estimate then solve.

Saul wants to buy a new iPhone and has found one for $624. So far he has saved $132. His goal is to buy the iPhone in the next 9 months. If he plans to save the same amount of money for each of the first 6 months and $60 each of the last three months, how much money will he need to save each of those 6 months?

Estimate:_____

Number Model with Unknown:_____

Answer: $_____ each month

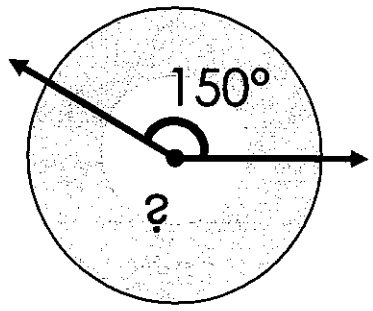
Is your answer reasonable? Explain._____

_____

_____

_____

2) Find the missing angle measures.

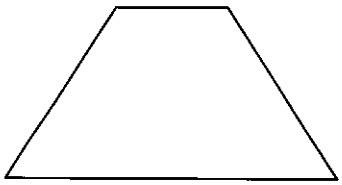


Equation with unknown:_____ Answer:_____

Unit 8 Review (continued)

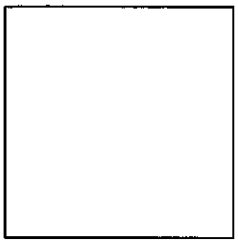
3) How many lines of symmetry does each shape have? Draw the lines of symmetry.

a.



_____ line(s) of symmetry

b.



_____ line(s) of symmetry

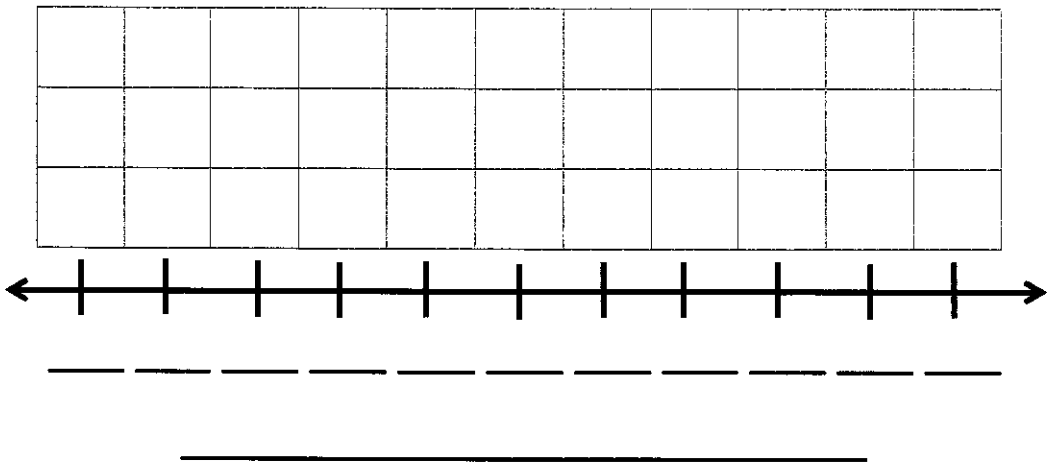
4) For a science project, Charlotte's family kept track of how many teaspoons of sugar her parents added to their coffee each day for 6 days.

This is the data they collected (in teaspoons):

$\frac{3}{4}, 1\frac{1}{4}, 1\frac{2}{4}, \frac{1}{4}, 1\frac{1}{4}, 2\frac{1}{4}, \frac{2}{4}, 2\frac{3}{4}, \frac{2}{4}, 2\frac{3}{4}, \frac{3}{4}, \frac{3}{4}$

a. Plot the data on the line plot below. Remember to give the line plot a title and to label the horizontal axis, including units.

Title:_____



_____

Label

b. What is the difference between the greatest amount of sugar Charlotte's parents added in 1 day and the least? _____ tsp

c. How many times did one of Charlotte's parents add more than 1 teaspoon of sugar to their coffee? _____ time(s)

What is the total when you add all of the amounts greater than 1 teaspoon?

_____ tsp

Unit 8 Review (continued)

5) The Jackson family has Christmas lights that measure 3.12 meters, 1.25 meters, and 2.7 meters. Find the combined length of the 3 Christmas light strings. Show your work.

_____ m

6) If I run for $\frac{1}{4}$ hour every day for two weeks, how many hours will I run in all?

_____ hr

Explain how you found your answer. _____

_____

7) Use the information below to solve the problems.

Use the information below to solve the problems.

Recipe for Summer Fruit Punch

8 cups cranberry juice

$3\frac{2}{4}$ cups pineapple juice

$3\frac{3}{4}$ cups orange juice

$\frac{1}{4}$ cup lemon juice

2 pints ginger ale

1 medium navel orange, sliced

In a large container, combine juices; refrigerate. Just before serving, transfer to a punch bowl; stir in ginger ale and orange slices.

a. How many cups do the different amounts of juice equal when combined? ____ c

b. Will a 6 quart container be big enough to hold all of the ingredients? Explain your answer. _____

_____

_____

Name: *ANSWER KEY* Date: _____

EVERYDAY MATHEMATICS—4th Grade
Unit 8 Review: Fraction Operations; Applications

1) Estimate then solve.

Saul wants to buy a new iPhone and has found one for $624. So far he has saved $132. His goal is to buy the iPhone in the next 9 months. If he plans to save the same amount of money for each of the first 6 months and $60 each of the last three months, how much money will he need to save each of those 6 months?

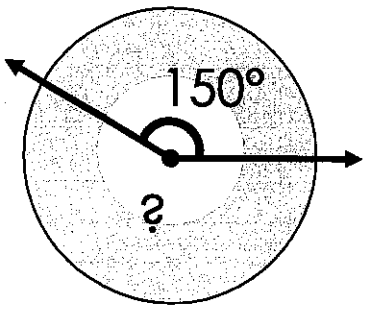
Estimate: 600 - 100 = 500, 500 - 50 - 50 - 50 = 350, 350 / 6 = about 60

Number Model with Unknown: Possible answer: 624 - 132 - 60 - 60 - 60) / 6 = m

Answer: $ 52 each month

Is your answer reasonable? Explain. Possible answer: Yes, I used easier numbers to see how much Saul still has to save after the first three months, and it is about $350. I divided $350 by 6 and it is a little less than 60.

2) Find the missing angle measures.

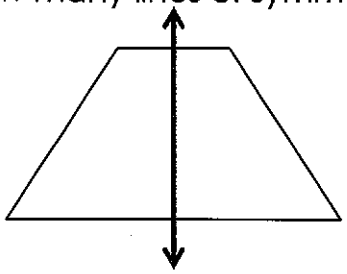


Equation with unknown: 360 - 150 = ? Answer: 210

Unit 8 Review (continued) *ANSWER KEY*

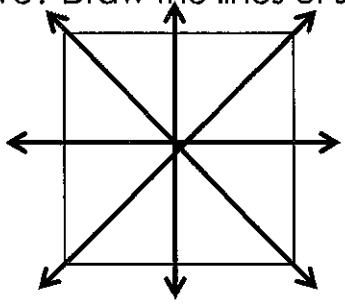
3) How many lines of symmetry does each shape have? Draw the lines of symmetry.

a.



1 line(s) of symmetry

b.



4 line(s) of symmetry

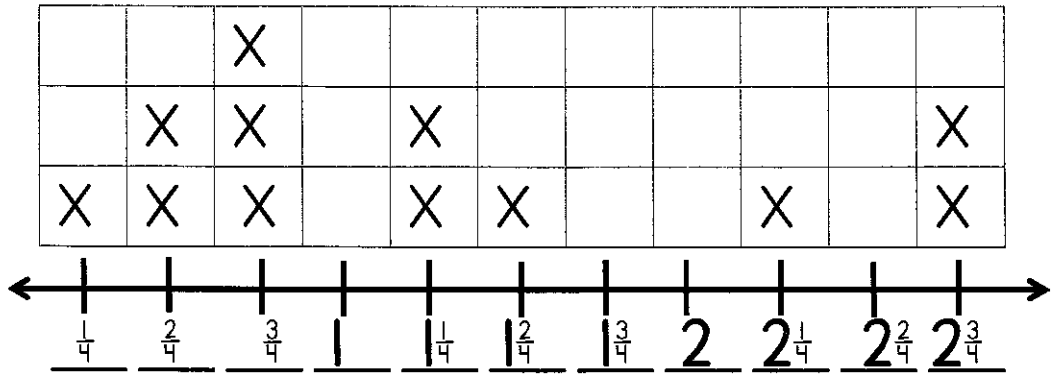
4) For a science project, Charlotte's family kept track of how many teaspoons of sugar her parents added to their coffee each day for 6 days.

This is the data they collected (in teaspoons):

$\frac{3}{4}, 1\frac{1}{4}, 1\frac{2}{4}, \frac{1}{4}, 1\frac{1}{4}, 2\frac{1}{4}, \frac{2}{4}, 2\frac{3}{4}, \frac{2}{4}, 2\frac{3}{4}, \frac{3}{4}, \frac{3}{4}$

a. Plot the data on the line plot below. Remember to give the line plot a title and to label the horizontal axis, including units.

Title: Possible answer: Amount of Sugar Per Day



Possible answer: Teaspoons of Sugar

Label

b. What is the difference between the greatest amount of sugar Charlotte's parents added in 1 day and the least? $2\frac{2}{4}$ tsp or $2\frac{1}{2}$

c. How many times did one of Charlotte's parents add more than 1 teaspoon of sugar to their coffee? 6 time(s)

What is the total when you add all of the amounts greater than 1 teaspoon?

$11\frac{3}{4}$ tsp

Unit 8 Review (continued) *ANSWER KEY*

5) The Jackson family has Christmas lights that measure 3.12 meters, 1.25 meters, and 2.7 meters. Find the combined length of the 3 Christmas light strings. Show your work.

$3\frac{12}{100} + 1\frac{25}{100} + 2\frac{7}{10} =$

$3\frac{12}{100} + 1\frac{25}{100} + 2\frac{70}{100} =$

$(3 + 1 + 2) + (\frac{12}{100} + \frac{25}{100} + \frac{70}{100}) =$

$6 + \frac{107}{100} =$

$6\frac{107}{100} = 7\frac{7}{100}$

$\frac{7.07}{6\frac{107}{100}\ \ 6\frac{7}{100}}$ m

6) If I run for $\frac{1}{4}$ hour every day for two weeks, how many hours will I run in all?

$3\frac{1}{2}$ hr

Explain how you found your answer. Possible answer: I multiplied ¼ by 7 days in a week, or 7 * ¼ = 7/4 or 1 ¾, then I doubled to get the total for 2 weeks. 1 ¾ + 1 ¾ = 3 ½.

7) Use the information below to solve the problems.

Recipe for Summer Fruit Punch

8 cups cranberry juice

$3\frac{2}{4}$ cups pineapple juice

$3\frac{3}{4}$ cups orange juice

$\frac{1}{4}$ cup lemon juice

2 pints ginger ale

1 medium navel orange, sliced

In a large container, combine juices; refrigerate. Just before serving, transfer to a punch bowl; stir in ginger ale and orange slices.

a. How many cups do the different amounts of juice equal when combined? $15\frac{1}{2}$ c

b. Will a 6 quart container be big enough to hold all of the ingredients? Explain your answer. Possible answer: Yes. I added all of the cups and got 15½ cups. Then I converted 2 pints to cups and got 4 cups, which makes a total of 19½ cups. 6 quarts equals 24 cups, and the total amount of liquid is less than that, so it will hold all of the ingredients.