

Name: _____ Date: _____

EVERYDAY MATHEMATICS—4th Grade

Unit 7 Review: Multiplication of a Fraction by a Whole Number; Measurement

1) Solve the number stories using pictures or equations.

a. We have 6 cans of tomatoes in the cabinet.

Each can weighs $\frac{5}{6}$ pound. How much do the cans weigh together?

Equation with unknown: _____

Answer: _____ pound(s)

b. Jacob bikes $\frac{7}{8}$ miles every day. How many miles does he bike in a week?

Equation with unknown: _____

Answer: _____ mile(s)

c. Andrea's cookie recipe calls for $1\frac{2}{3}$ cups of chocolate chips. If she wants to quadruple the recipe, how many cups of chocolate chips will she need?

Equation with unknown: _____

Answer: _____ cup(s) of chocolate chips

2) List the next 4 multiples of $\frac{1}{4}$ in order:

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

b. $\frac{5}{3}$ is a multiple of the unit fraction _____.

c. $\frac{5}{2} = 5 * \frac{1}{2}$.

Unit 7 Review (continued)

3) Convert.

3 gallons	_____ quarts
4 quarts	_____ pints
7 quarts	_____ pints
4 pints	_____ cups
14 pints	_____ cups

- 4) John's recipe calls for 5 pints of chicken stock.
He had 6 quarts of chicken stock and gave 4 pints away.

Does he have enough chicken stock for his recipe? _____

How many pints of chicken stock does he have? _____

- 5) Solve the number story and show how you solved the problem.
Gabiella needs to make cupcakes for her club's bake sale.
Each box of cupcake mix costs \$0.75.
If she buys 5 or more boxes, they cost only \$0.56 each.

If she decides to buy 7 boxes, how much will she spend? \$ _____

Unit 7 Review (continued)

6) Ella and Karissa work as cooks at two restaurants.

At The Burger Hut, they each work 4 hours per week.

Together they make \$192 each week at The Burger Hut.

At the Sandwich Joint, they each work 8 hours per week.

Together they earn \$304 each week at The Sandwich Joint.

Which restaurant pays more per hour to each girl? How much more per hour?

a. Estimate: _____

b. The _____ pays more per hour. It pays \$_____ more per hour.

c. Equation(s) with unknown: _____

d. Look back at your estimate. Does your answer make sense?

7) Read the number story.

Use the information to write an equation and solve the problem below.

Imani is making ribbons for the dance show for the 4 dancers on her team.

Each ribbon needs to be 3 yards long.

Imani has a 38 foot piece of ribbon.

Will she have any leftover ribbon? _____

If so, how much? _____
(unit)

Equation: _____

Unit 7 Review (continued)

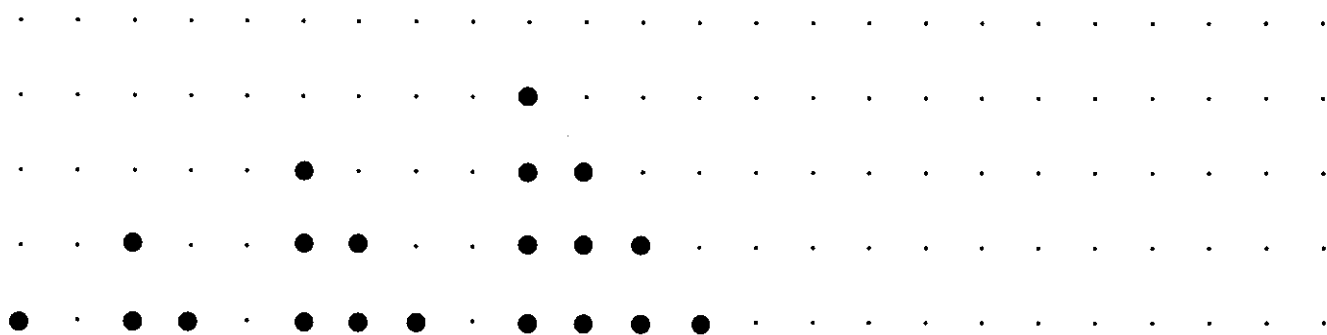
8) a. If a dictionary weighs $\frac{1}{4}$ pound, what is the weight of 6 dictionaries?

_____ pound(s)

b. How many ounces is that? _____ ounce(s)

c. How do you know? _____

9) Draw the dot pattern that comes next and record the number of dots in the pattern.



1 3 6 10 _____

Write a description of the pattern. _____

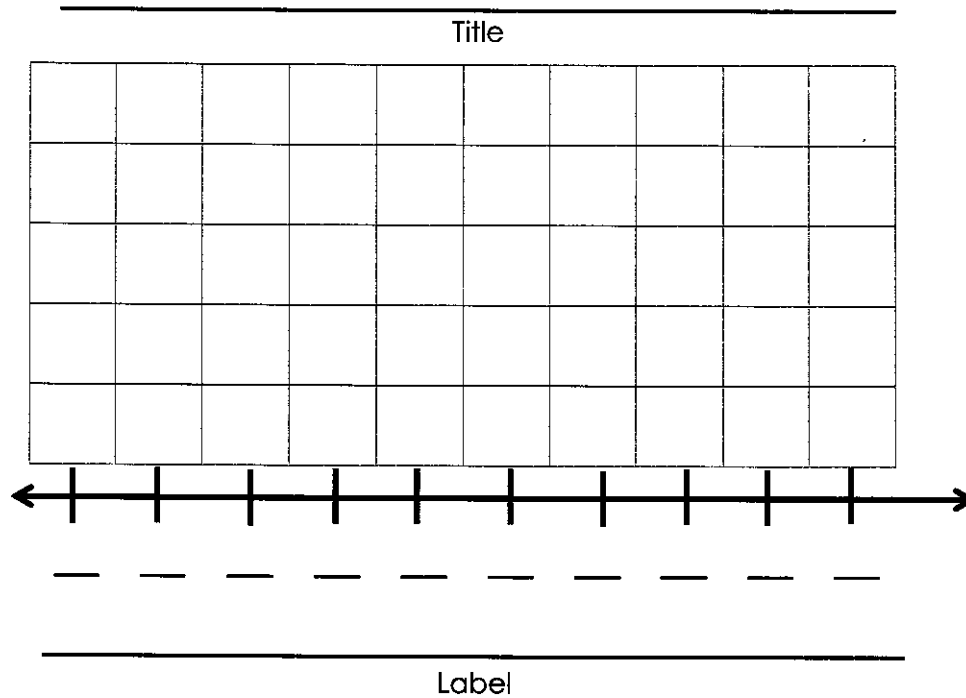
How do you how many dots to add each time? _____

Unit 7 Review (continued)

10) For 4 days the Martin family kept track of how much water each member drank throughout the day. The measured to the nearest $\frac{1}{8}$ cup. Here are their results:

$0, \frac{7}{8}, \frac{1}{8}, \frac{4}{8}, 1, \frac{1}{8}, \frac{6}{8}, \frac{7}{8}, \frac{1}{8}, \frac{2}{8}, \frac{7}{8}, \frac{7}{8}$

a. Complete the line plot.



b. How many times did family members use $\frac{7}{8}$ cups of water? _____

How much water is this all together? _____ cup(s)

c. What was the greatest amount of water someone used in a day? _____ cup(s)

What amount of water per day was used most often? _____ cup(s)

What is the difference between those amounts? _____ cup(s)

EVERYDAY MATHEMATICS—4th Grade**Unit 7 Review: Multiplication of a Fraction by a Whole Number; Measurement**

1) Solve the number stories using pictures or equations.

a. We have 6 cans of tomatoes in the cabinet.

Each can weighs $\frac{5}{6}$ pound. How much do the cans weigh together?

Equation with unknown: $6 * \frac{5}{6} = p$

Answer: 5 pound(s)

b. Jacob bikes $\frac{7}{8}$ miles every day. How many miles does he bike in a week?

Equation with unknown: $7 * \frac{7}{8} = m$

Answer: $6\frac{1}{8}$ mile(s)

c. Andrea's cookie recipe calls for $1\frac{2}{3}$ cups of chocolate chips. If she wants to quadruple the recipe, how many cups of chocolate chips will she need?

Equation with unknown: $4 * 1\frac{2}{3} = c$

Answer: $6\frac{2}{3}$ cup(s) of chocolate chips

2) List the next 4 multiples of $\frac{1}{4}$ in order:

$\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$, $\frac{4}{4}$, $\frac{5}{4}$, $\frac{6}{4}$

b. $\frac{5}{3}$ is a multiple of the unit fraction $\frac{1}{3}$.

c. $\frac{5}{2} = 5 * \frac{1}{2}$.

Unit 7 Review (continued) *ANSWER KEY*

6) Ella and Karissa work as cooks at two restaurants.

At The Burger Hut, they each work 4 hours per week.

Together they make \$192 each week at The Burger Hut.

At the Sandwich Joint, they each work 8 hours per week.

Together they earn \$304 each week at The Sandwich Joint.

Which restaurant pays more per hour to each girl? How much more per hour?

a. Estimate: Possible answer: Burger: $200 / 2 = 100$; $100 / 5 = \$20$

Sandwich: $300 / 2 = 150$; $150 / 10 = \$15$ $\$20 - \$15 = \text{about } \$5$

b. The Burger Hut pays more per hour. It pays \$ 5 more per hour.

Possible solution:

$$\begin{array}{r} (192 / 2 / 4) - (304 / 2 / 8) = n \\ 24 \quad - \quad 19 \quad = 5 \end{array}$$

Possible answer:

c. Equation(s) with unknown: $(192 / 2 / 4) - (304 / 2 / 8) = n$

d. Look back at your estimate. Does your answer make sense?

Possible answer: Yes, my estimate said The Burger Hut

would pay about \$5 more. My exact answer was also

that The Burger Hut pays \$5 more per hour.

7) Read the number story.

Use the information to write an equation and solve the problem below.

Imani is making ribbons for the dance show for the 4 dancers on her team.

Each ribbon needs to be 3 yards long.

Imani has a 38 foot piece of ribbon.

Will she have any leftover ribbon? yes

If so, how much? 2 feet
(unit)

Equation: Possible answer: $38 / (3 * 3) = x$

Unit 7 Review (continued) *ANSWER KEY*

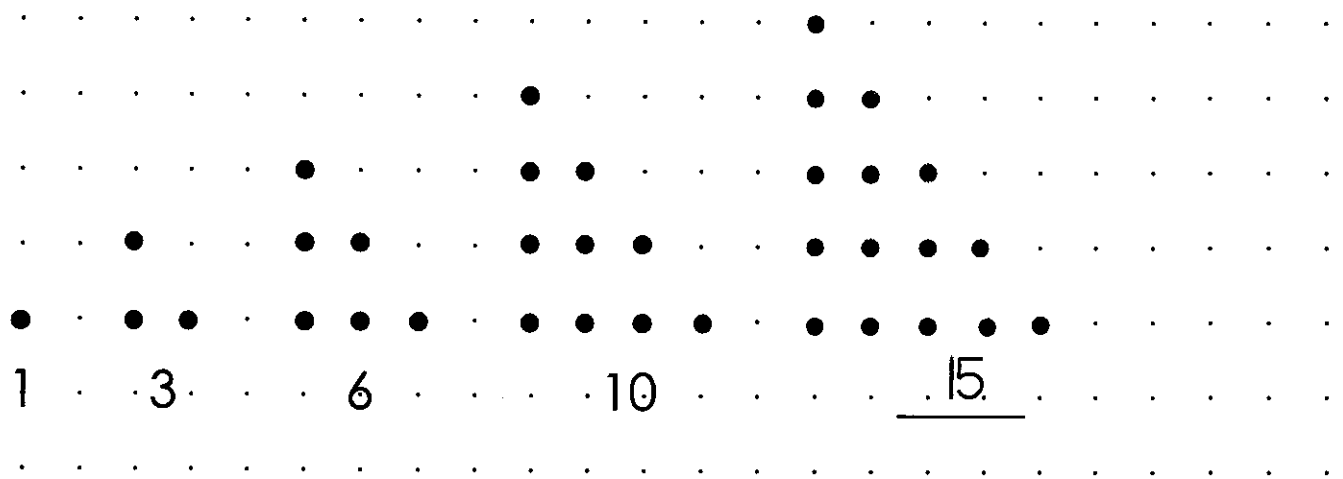
8) a. If a dictionary weighs $\frac{1}{4}$ pound, what is the weight of 6 dictionaries?

$1\frac{1}{2}$ pound(s) or $1\frac{2}{4}$

b. How many ounces is that? 24 ounce(s)

c. How do you know? Possible answer: I know that there are 16 ounces in 1 pound, plus half a pound is 8 ounces. I added $16 + 8$ and got 24.

9) Draw the dot pattern that comes next and record the number of dots in the pattern.



Write a description of the pattern. Possible answer: It increases by 1 every time. For example, it starts with 1, then increases by 2, then 3, then 4, then 5. There are a total of 15 dots in the fifth pattern.

How do you know how many dots to add each time? Possible answer: Add 1 dot to each row and column each time. Add 1 more dot to the amount it increases by each time (2, 3, 4, 5, 6...)

Unit 7 Review (continued) *ANSWER KEY*

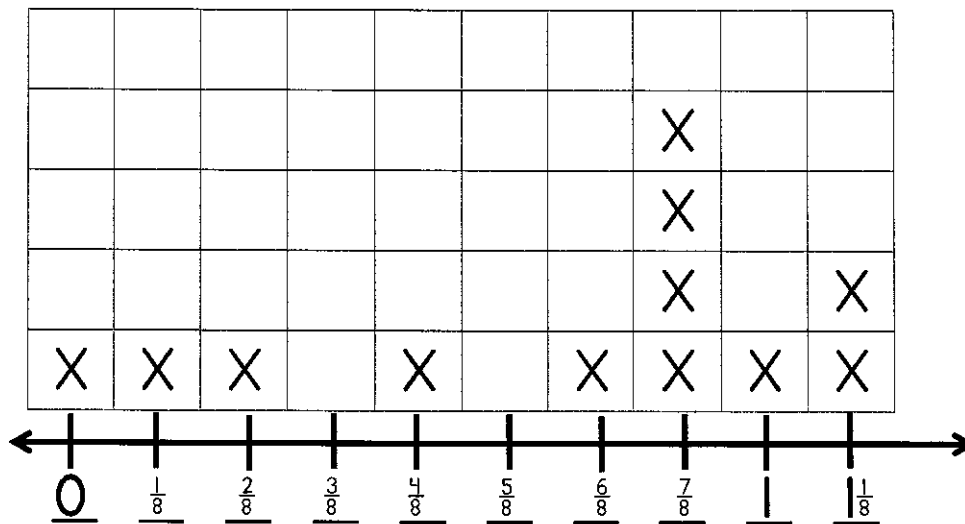
10) For 4 days the Martin family kept track of how much water each member drank throughout the day. The measured to the nearest $\frac{1}{8}$ cup. Here are their results:

$0, \frac{7}{8}, 1\frac{1}{8}, \frac{4}{8}, 1, \frac{1}{8}, \frac{6}{8}, \frac{7}{8}, 1\frac{1}{8}, \frac{2}{8}, \frac{7}{8}, \frac{7}{8}$

a. Complete the line plot.

Possible answer: Water Consumed by the Martin Family

Title



Possible answer: Water (in cups)

Label

b. How many times did family members use $\frac{7}{8}$ cups of water? 4 times

How much water is this all together? $3\frac{4}{8}$ cup(s) or $\frac{28}{8}$ or $3\frac{1}{2}$

c. What was the greatest amount of water someone used in a day? $1\frac{1}{8}$ cup(s)

What amount of water per day was used most often? $\frac{7}{8}$ cup(s)

What is the difference between those amounts? $\frac{2}{8}$ cup(s)