

Unit 7 Assessment

Study Guide

Solve. Show your work.

① $4 * 2\frac{5}{8} = ?$

② $3\frac{1}{2} * 2\frac{4}{5} = ?$

$4 * 2\frac{5}{8} = \frac{84}{8} \text{ or } 10\frac{4}{8}$

$3\frac{1}{2} * 2\frac{4}{5} = \frac{98}{10} \text{ or } 9\frac{8}{10}$

- ③ Explain the strategy you used to solve Problem 2.
Explain why you chose that strategy.

Answers vary

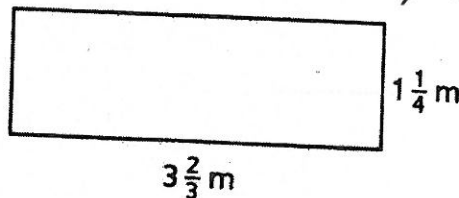
- ④ Write a number story that can be modeled by Problem 1.

Chris drew a picture that is $2\frac{5}{8}$ wide. His teacher enlarged the picture so it is 4 times as wide. How many inches wide is the copy of the picture?

- ⑤ Reed's class created a mural in the hallway. The space that they used for the mural is shown at the right. What is the area of the mural?

Area = _____ m^2

$$\frac{55}{12} \text{ or } 4\frac{7}{12}$$



Unit 7 Assessment (continued)

Solve Problems 6 and 7 using common denominators. Show your work.

Use multiplication to check your answer.

⑥ $6 \div \frac{1}{4} = ?$

$$\frac{6}{1} \times \frac{4}{1} = \frac{24}{1} = 24$$

$$6 \div \frac{1}{4} = \underline{24}$$

Check: _____

⑦ $\frac{1}{3} \div 5 = ?$

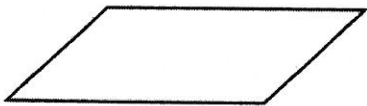
$$\frac{1}{3} \times \frac{1}{5} = \frac{1}{15}$$

$$\frac{1}{3} \div 5 = \underline{\frac{1}{15}}$$

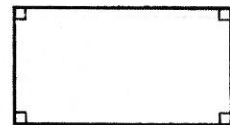
Check: _____

You may use the Quadrilateral Hierarchy Poster to help you solve Problems 8 and 9.

- ⑧ List as many names for this figure as you can.

Quadrilateral, trapezoid, parallelogram

- ⑨ Alex is classifying this figure on the quadrilateral hierarchy. He thought: *This has four sides, so it is a quadrilateral. It has a pair of parallel sides, so it is a trapezoid. Actually, it has two pairs of parallel sides, so it is also a parallelogram!*



- a. Can Alex move the figure down to the Rhombus category? Why or why not?

NO, because the figure does not have 4 sides that are the same length.

- b. Can Alex move the figure down to the Rectangle category? Why or why not?

Yes. The figure has 4 right angles.



Unit 7 Assessment (continued)

- ⑩ Justine made 3 loaves of banana bread.
If one serving is $\frac{1}{8}$ loaf, how many servings does Justine have?

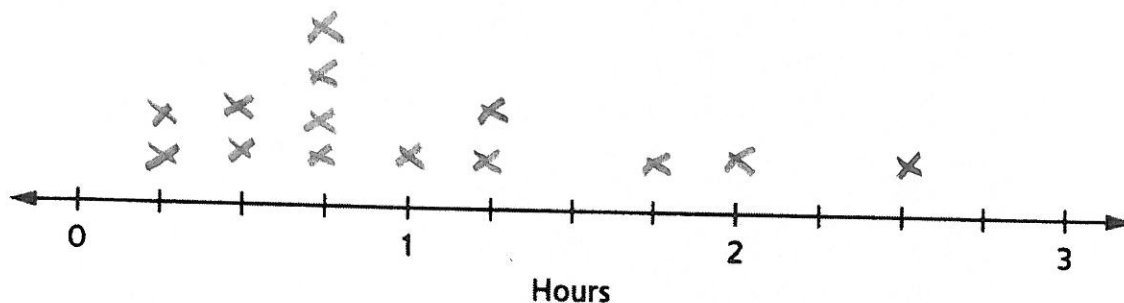
Number model: $3 \div \frac{1}{8} = 24$

Answer: 24 servings

- ⑪ These numbers show how long Janine's friends spent on homework on Monday night.

$\frac{3}{4}$ hour	$\frac{1}{2}$ hour	$1\frac{1}{4}$ hours	$2\frac{1}{2}$ hours	1 hour	$1\frac{1}{4}$ hours	$\frac{1}{4}$ hour
$\frac{1}{4}$ hour	$\frac{1}{2}$ hour	$\frac{3}{4}$ hour	$\frac{3}{4}$ hour	2 hours	$1\frac{3}{4}$ hours	$\frac{3}{4}$ hour

- a. Use the data to create a line plot.



- b. What is the difference between the longest amount of time and the shortest amount of time it took students to do homework? $2\frac{1}{4}$ hours
- c. How many students spent an hour or less on homework? 9 students
- d. How much time did those students spend on homework combined? $5\frac{3}{4}$ hours
or $5\frac{1}{2}$ hours



Unit 7 Assessment (continued)

- 12 a. Use the given rules to fill in the columns of the table.

in (x) Rule: + 5	out (y) Rule: + 1
0	0
5	1
10	2
15	3
20	4

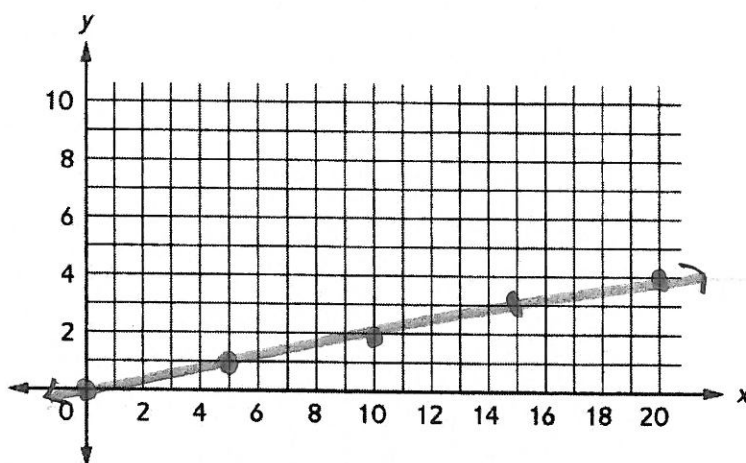
- b. Write a rule to describe the relationship between the *in* and *out* numbers.

Rule: $\div 5$

- c. Write the numbers in the table as ordered pairs. Then plot the points on the grid below. Connect the points with a line.

Ordered pairs:

(0, 0)
(5, 1)
(10, 2)
(15, 3)
(20, 4)



- 13 The graph in Problem 12c models this situation:
Alexis saves $\frac{1}{5}$ of the money she earns babysitting to buy a new pair of sneakers.
Use the graph to answer the following questions.

- a. If Alexis has earned \$10, how much money has she saved for sneakers?

2 dollars

- b. If Alexis has earned \$18, about how much money has she saved for sneakers?

between 3 and 4 dollars.