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Unit 3 Assessment

Solve the following number stories. Use your fraction circle pieces or a drawing to help you.

1 There are three small rounds of cheddar cheese in Grace's refrigerator. She wants to bring a small wedge of cheese in her lunch every day for the next 12 days of school. If she wants to eat the same amount of cheese every day, how much cheese should she bring for lunch each day?

Number model: _____

2 Three families live in the same apartment building. They decided to share a giant 220-ounce container of laundry detergent. If the families split the detergent equally, how many ounces of laundry detergent will each family get?

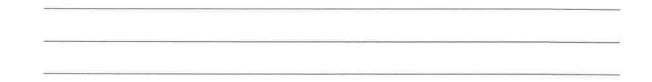
Solution: _____

Number model:

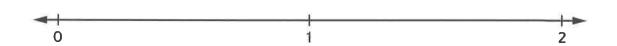
Explain what you did with the remainder and why.

Unit 3 Assessment (continued)

Write a division number story with an answer of $\frac{1}{4}$.



Divide the number line below so that it shows eighths. Label the eighths on the number line.



Use division, the Fraction Number Lines Poster, or fraction circle pieces to rename the fractions as mixed numbers.

a.
$$\frac{12}{5} =$$

b.
$$\frac{15}{2} =$$

Explain how you solved Problem 5b.

Jeremy said, "I added $\frac{3}{4} + \frac{1}{5}$ and got $\frac{4}{9}$." Does Jeremy's answer make sense? Explain how you know without calculating an answer.

Unit 3 Assessment (continued)

(8) Write a fraction to make each number sentence true. Use your fraction circle pieces or the Fraction Number Lines Poster to help you.

a.
$$+\frac{1}{2} > 1$$

c.
$$1 + \underline{\hspace{1cm}} > 1\frac{1}{2}$$

d.
$$1 - \frac{1}{2}$$

9 A chef had $2\frac{1}{3}$ heads of lettuce. She used $\frac{2}{3}$ head of lettuce to make a salad. How many heads of lettuce does she have left?

Number model:

Estimate: _____

Answer: _____ heads of lettuce

Natasha is growing a plant for a science project. On Monday she measured the plant and found it was $2\frac{1}{8}$ inches tall. On Wednesday she measured the plant and found it was $3\frac{2}{8}$ inches tall. Natasha told her teacher that her plant grew $5\frac{3}{8}$ inches from Monday to Wednesday.

a. What mistake did Natasha make?

b. How much did the plant actually grow from Monday to Wednesday?

Answer: The plant grew _____ inches from Monday to Wednesday.

Unit 3 Assessment (continued)

Solve. Use your fraction circle pieces to help.

a.
$$\frac{1}{3} + \frac{1}{6} =$$

b.
$$\frac{3}{4} + \frac{1}{12} =$$

(12) What is:

a.
$$\frac{1}{4}$$
 of 20? _____

b.
$$\frac{1}{3}$$
 of 9? _____

c.
$$\frac{1}{2}$$
 of 9?

d.
$$\frac{1}{5}$$
 of 11? _____

Jason bought a case of 60 oranges from his school fundraiser. He gave $\frac{1}{5}$ of the oranges to his aunt. How many oranges did his aunt get?

Answer: _____ oranges

Write another name for each mixed number that has the same denominator.

a.
$$8\frac{1}{2}$$

b.
$$2\frac{7}{5}$$

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Unit 3 Challenge

- 1 Amelie is setting up a water station for cross-country practice.

 Ten runners will run by. She estimates that 1 jug of water will serve 3 runners.
 - a. How much water does Amelie think each runner will need? _____ jug
 - b. How many jugs of water will Amelie need?

Amelie will need _____ jugs of water.

c. Explain how you found your answer.

There were $5\frac{7}{10}$ liters of water in a bucket. Mollie spilled some of the water. Then she added an additional $1\frac{5}{10}$ liters of water to the bucket. After that, there were $6\frac{4}{10}$ liters of water in the bucket.

a. Write a number model for the story.Use a letter to represent the amount of water Mollie spilled.

Number model: _____

b. How much water did Mollie spill?

Mollie spilled _____ liter of water.

Lesson 3-15

Unit 3 Challenge (continued)

Shauna and Terrence were working together to solve the following problem:

Danny is $60\frac{3}{4}$ inches tall. His twin sister is $58\frac{1}{8}$ inches tall. How much taller is Danny than his twin sister?

- Shauna solved the problem by thinking about addition. Explain how she could have used addition to find the answer.
- Terrence solved the problem by thinking about subtraction. Explain how he could have used subtraction to find the answer.
- Solve the problem. Explain how you solved it.
- Carlos solved the problem $\frac{1}{8}$ of 7 and got the answer $1\frac{3}{8}$. Gricel said, "I can tell just by looking at the problem that your answer doesn't make sense."
 - a. How can Gricel tell the answer doesn't make sense?
 - **b.** What is $\frac{1}{8}$ of 7? Explain how you solved the problem.