1 pt

1. A 6-mile walking trail has a distance marker every $\frac{1}{3}$ mile. How many markers are along the trail?

There are __18__ markers along the trail.

5 pts possible

2. For numbers 2a–2e, select True or False for each equation.

1 point each

2a. $\frac{1}{6} \div 2 = 12$ ○ True ● False

2b. $5 \div \frac{1}{4} = \frac{1}{20}$ ○ True ● False

2c. $\frac{1}{3} \div 8 = \frac{1}{24}$ ● True ○ False

2d. $\frac{1}{8} \div 5 = 40$ ○ True ● False

2e. $4 \div \frac{1}{7} = 28$ ● True ○ False

1 pt

3. Ten pounds of rice are distributed equally into 6 bags to give out at the food bank. How many pounds of rice are in each bag?

__$\frac{5}{3}$ or $1\frac{2}{3}$__ pounds

1 pt

4. Eric has 4 pieces of clay. He cut each piece of clay into thirds. How many $\frac{1}{3}$-size pieces of clay does Eric have? Draw lines in the model to find the answer.

Eric has __12__ $\frac{1}{3}$-size pieces of clay.

1 pt

5. Four friends share 3 apples equally. What fraction of an apple does each friend get?

Each friend will get $\frac{3}{4}$ of an apple.

GO ON

6. Tammy, Marci, and Wesley bought $\frac{1}{2}$ pound of raspberries. They are sharing the raspberries equally. Each person will

receive ___$\frac{1}{6}$___ pound of raspberries.

1pt

7. Choose the numbers to create a story problem that represents $3 \div \frac{1}{4}$.

1pt

Rob bought $\begin{array}{|c|} \hline \frac{1}{3} \\ \frac{1}{4} \\ \boxed{3} \\ \hline \end{array}$ pounds of roast beef.

1pt for both correct

He made sandwiches for a picnic and used $\begin{array}{|c|} \hline 4 \\ \boxed{\frac{1}{4}} \\ \frac{1}{3} \\ \hline \end{array}$ pound of roast beef in each sandwich.

Rob made 12 sandwiches.

8. Ruslan reads $\frac{1}{3}$ of a book every day. Victoria reads $\frac{1}{4}$ of a book every day.

3pts possible

Part A

Ruslan needs to read 4 books for class. How long would it take Ruslan to read 4 books? Show your work.

1pt

$4 \div \frac{1}{3} = 4 \times 3 = 12$
It would take Rulsan 12 days to read 4 books.

Part B —*2pts possible*

How much longer would it take Victoria than Ruslan to read 10 books? Explain how you found your answer.

1pt

10 days; Possible explanation: First, I found the time it would take Ruslan to read 10 books:
$10 \div \frac{1}{3} = 10 \times 3 = 30$, or 30 days. Then, I found the time it would take Victoria to read 10 books:
$10 \div \frac{1}{4} = 10 \times 4 = 40$, or 40 days. Then I subtracted $40 - 30 = 10$.

1pt for explanation

GO ON

1pt

9. Cecila has $\frac{1}{3}$ pound of trail mix that she will divide equally into 3 bags. Shade the diagram to show the fractional part of a pound that will be in each bag.

2pts possible

10. Mrs. Reid wrote the following problem on the whiteboard:

Tom and Michele shared $\frac{1}{4}$ pound of grapes equally. What fractional part of a pound did each person receive?

Part A

Christina wrote the following equation to solve the problem: $2 \div \frac{1}{4} = n$. Do you agree with Christina's equation? Support your answer with information from the problem.

1pt

> No, I disagree. Possible answer: Tom and Michele are sharing $\frac{1}{4}$ pound of grapes. I need to divide $\frac{1}{4}$ by 2, so the correct equation is $\frac{1}{4} \div 2 = n$.

Part B

Ryan drew this diagram to solve the problem. Can Ryan use his diagram to find the fractional part of a pound of grapes that each person received? Support your answer with information from the problem.
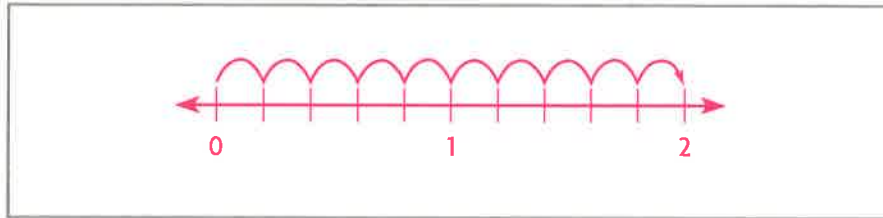

1pt

> Yes. Possible answer: Ryan divided the square into 4 equal parts to represent quarters. Then, he divided each quarter in half. He shaded half of $\frac{1}{4}$ of the square. So, the diagram represents $\frac{1}{4} \div 2 = \frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$. Since $\frac{1}{8}$ of the square is shaded, Tom and Michele will each get $\frac{1}{8}$ pound of grapes.

GO ON

11. Divide. Draw a number line to show your work.

1pt

$2 \div \frac{1}{5} =$ [**10**]

12. Terry picked 7 pounds of strawberries. She wants to share the strawberries equally among 3 of her neighbors. How many pounds of strawberries will each neighbor receive? Use the numbers on the tiles to complete the number sentence. You may use a number more than once or not at all.

3pts possible

1	2	3
4	6	7

$\boxed{7} \div \boxed{3} = \dfrac{\boxed{7}}{\boxed{3}} = \boxed{2}\dfrac{\boxed{1}}{\boxed{3}}$

1pt   *1pt*   *1pt*

13. Aidan buys one package each of 2-pound, 3-pound, and 4-pound packages of ground turkey to make turkey burgers.

2pts possible

Part A

How many $\frac{1}{3}$-pound turkey burgers can he make? Show your work using words, pictures, or numbers.

=1pt

> **Check students' work. 27 turkey burgers; Possible explanation: I found the total number of pounds of ground turkey Aidan bought: 2 + 3 + 4 = 9. Then, I wrote a related multiplication expression to find $9 \div \frac{1}{3}$. $9 \div \frac{1}{3} = 9 \times 3 = 27$**

1pt for correct explanation

14. Annette has $\frac{1}{4}$ yard of fabric. She cuts it into 3 equal pieces. Each piece of fabric is __$\frac{1}{12}$__ yard.

1pt

GO ON

15. Twelve friends share 4 bread rolls equally. What fraction of a bread roll does each friend get?

Each friend will get $\frac{4}{12}$ or $\frac{1}{3}$ of a bread roll.

1pt

16. Ben is making bread that calls for 5 cups of flour. His measuring cup only holds $\frac{1}{2}$ cup. How many times will Ben need to fill the measuring cup to get the 5 cups of flour?

1pt

Ben will need to fill the measuring cup 10 times.

17. Tina has $\frac{1}{2}$ quart of iced tea. She pours the same amount into each of 3 glasses. Which equation represents the fraction of a quart of iced tea that is in each glass? Mark all that apply.

1pt

Ⓐ $\frac{1}{2} \div \frac{1}{3} = n$ Ⓒ $2 \div \frac{1}{3} = n$ Ⓔ $2 \times \frac{1}{3} = n$
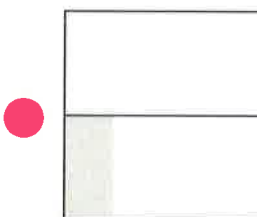
Ⓑ $2 \div 3 = n$ ● $\frac{1}{2} \times \frac{1}{3} = n$ ● $\frac{1}{2} \div 3 = n$

18. Kyle made a loaf of banana bread. He gave equal portions of $\frac{1}{2}$ of the loaf to 4 friends. Which diagram could Kyle use to find the fraction of the loaf that each friend received? Mark all that apply.

1pt

GO ON

3 pts possible

19. Your teacher gives you the problem $5 \div \frac{1}{4}$.

Part A ~ 1 pt

Draw a diagram to represent $5 \div \frac{1}{4}$.

Possible diagram:

Part B - 1 pt

Write a story problem to represent $5 \div \frac{1}{4}$.   **Check students' story problems.**

Possible problem: Sam has 5 feet of string. He cuts the string into pieces that are $\frac{1}{4}$ foot long. How many pieces of string does he have now?

Part C - 1 pt

Use a related multiplication expression to solve your story problem. Show your work.   **Check students' work.**

$5 \div \frac{1}{4} = 5 \times 4 = 20$; 20 pieces

2 pts possible

20. Five brothers picked 5 pounds of apples. Two of the brothers will share 3 pounds of apples equally and the other 3 brothers will share 2 pounds of the apples equally. In which group does each brother get a greater amount of apples? Explain your reasoning.

1 pt for correct answer

1 pt for correct explanation

The group of 2 brothers will get a greater amount of apples. Possible explanation: $3 \div 2 = \frac{3}{2}$ and $2 \div 3 = \frac{2}{3}$
$\frac{3}{2} = 1\frac{1}{2}$
$1\frac{1}{2} > \frac{2}{3}$

STOP