



ST Math.
Summer Immersion
Grade 4 | Quizzes Answer Key

Module 1 Pre-Quiz

1. Circle the fraction that is closer to $\frac{1}{2}$. in each pair of fractions.

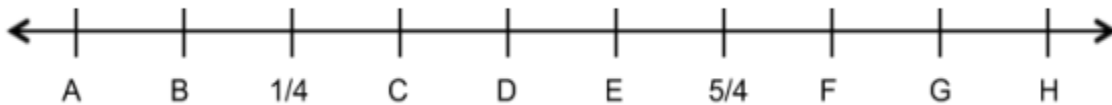
$$\frac{1}{4} \text{ or } \frac{2}{4}$$

$$\frac{1}{6} \text{ or } \frac{4}{6}$$

$$\frac{5}{8} \text{ or } \frac{2}{8}$$

$$\frac{1}{3} \text{ or } \frac{1}{4}$$

2. Write the letter next to each number to show where it goes on the number line.



$$1 \text{ } \underline{\text{E}}$$

$$\frac{1}{2} \text{ } \underline{\text{C}}$$

$$0 \text{ } \underline{\text{B}}$$

$$2 \text{ } \underline{\text{H}}$$

$$1\frac{1}{2} \text{ } \underline{\text{F}}$$

$$\frac{6}{3} \text{ } \underline{\text{H}}$$

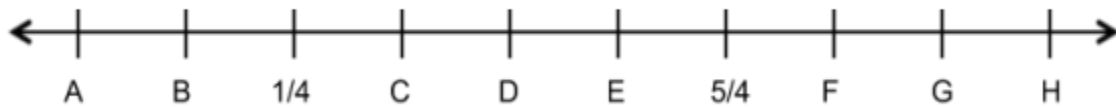


Module 1 Post-Quiz

1. Circle the fraction that is closer to $\frac{1}{2}$. in each pair of fractions.

$$\frac{3}{8} \text{ or } \frac{4}{8}$$
$$\frac{2}{6} \text{ or } \frac{5}{6}$$
$$\frac{8}{10} \text{ or } \frac{5}{8}$$
$$\frac{1}{3} \text{ or } \frac{1}{4}$$

2. Write the letter next to each number to show where it goes on the number line.



$$0 \text{ } \underline{\text{B}}$$

$$\frac{3}{4} \text{ } \underline{\text{D}}$$

$$1 \text{ } \underline{\text{E}}$$

$$2 \text{ } \underline{\text{H}}$$

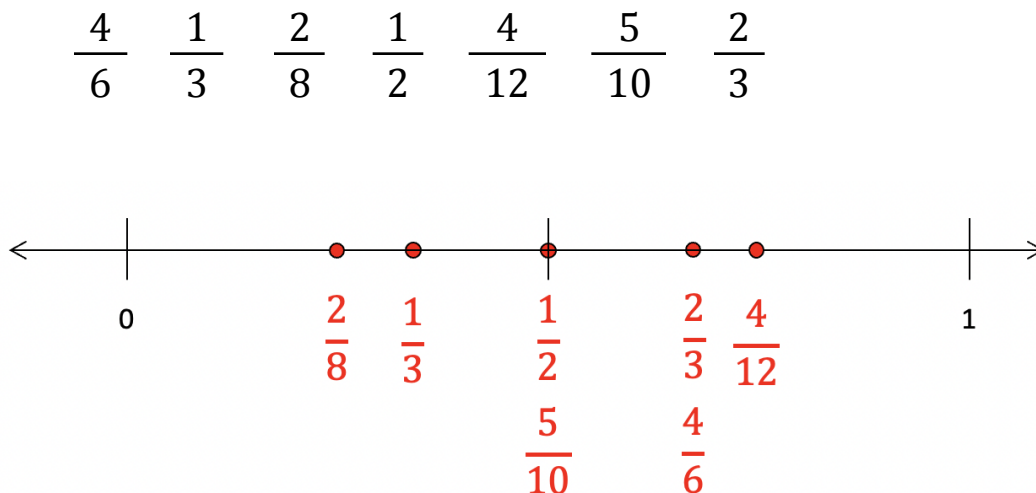
$$1\frac{1}{4} \text{ } \underline{\text{F}}$$

$$\frac{4}{4} \text{ } \underline{\text{E}}$$



Module 2 Pre-Quiz

- Osmar, Anthony, and Reyland each had a large pizza. Osmar cut his pizza into eighths and ate $\frac{6}{8}$ of the pizza. Anthony cut his pizza into fourths and ate $\frac{3}{4}$ of the pizza. Reyland cut his pizza into sixths and ate $\frac{2}{6}$ of the pizza.
 - Which boy ate the least amount of pizza? *Reyland ate the least amount of pizza.*
 - Did any of the boys eat the same amount of pizza? If so, who? Explain how you know. *Osmar and Anthony ate the same amount of pizza because $\frac{6}{8}$ is equal to $\frac{3}{4}$.*
- Draw a number line. Use dots to show the location of these fractions and labels.



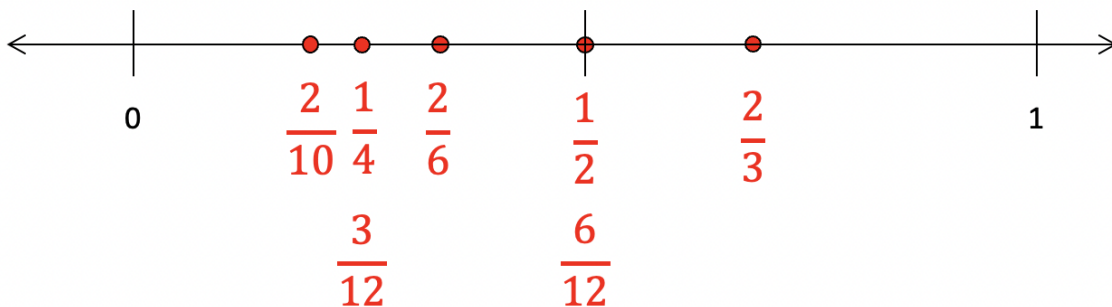
Drawings will vary. Dots can be estimated, but fractions should be in order.



Module 2 Post-Quiz

1. Sidney, Raven, and Jayla were making bracelets. Each girl used purple, white, and pink beads to make their bracelet. Sidney's bracelet had 12 beads and $\frac{3}{12}$ of her bracelet was purple. Raven's bracelet had 8 beads and $\frac{6}{8}$ of her bracelet was purple. Jayla's bracelet had 10 beads and $\frac{2}{10}$ of her bracelet was purple.
- Which girl used the least amount of purple beads? *Jayla used the least amount of purple beads.*
 - Did any of the girls use the same number of purple beads? If so, who? Explain how you know. *None of the girls had the same amount of purple beads. Sidney had 3, Raven had 6, and Jayla had 2 purple beads.*
2. Draw a number line. Use dots to show the location of these fractions and labels.

$$\frac{6}{12} \quad \frac{2}{10} \quad \frac{1}{4} \quad \frac{2}{6} \quad \frac{1}{2} \quad \frac{3}{12} \quad \frac{2}{3}$$

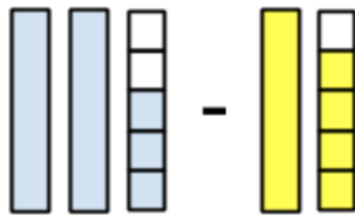


Drawings will vary. Dots can be estimated but fractions should be in order.



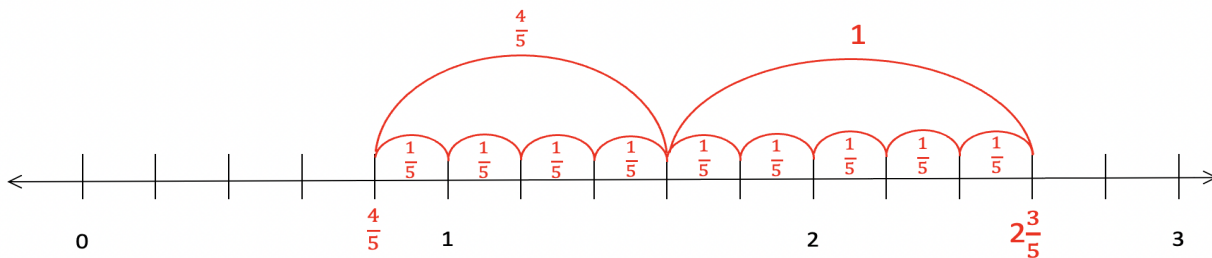
Module 3 Pre-Quiz

1. Marti said that the answer to this subtraction problem is $1\frac{1}{5}$. What error do you think Marti made? What would you say to Marti to help her understand the solution to this problem? Use a number line and write an equation to show the solution.

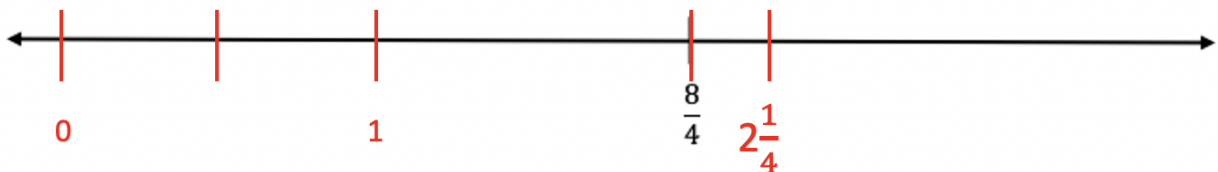


Answers will vary. It looks like Marti took the larger number of blocks and subtracted the smaller number of blocks. 2 blue longs - 1 yellow long = 1 long and 4 yellow cubes - 3 blue cubes = 1 cube. It might help Marti if she divided each of the longs into 5 cubes each, so 13 cubes (or fifths) - 9 cubes (or fifths) = 4 cubes or 4 fifths ($\frac{4}{5}$)

The equation is $2\frac{3}{5} - 1\frac{4}{5} = \frac{4}{5}$ OR $\frac{13}{5} - \frac{9}{5} = \frac{4}{5}$



2. Use the plotted point on this number line to locate $\frac{1}{2} + 1\frac{3}{4}$

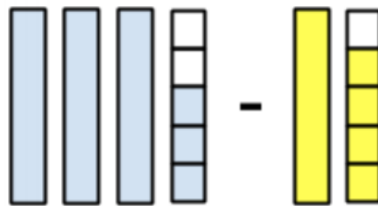


Number lines will vary.



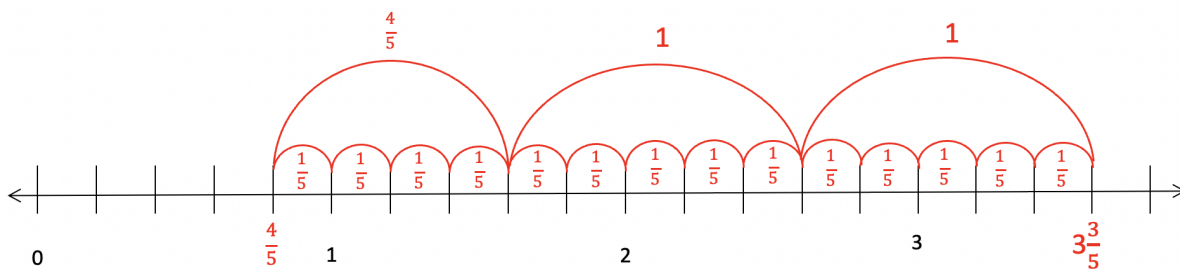
Module 3 Post-Quiz

1. Marti said that the answer to this subtraction problem is $2\frac{1}{5}$. What error do you think Marti made? What would you say to Marti to help her understand the solution to this problem? Use a number line and write an equation to show the solution.

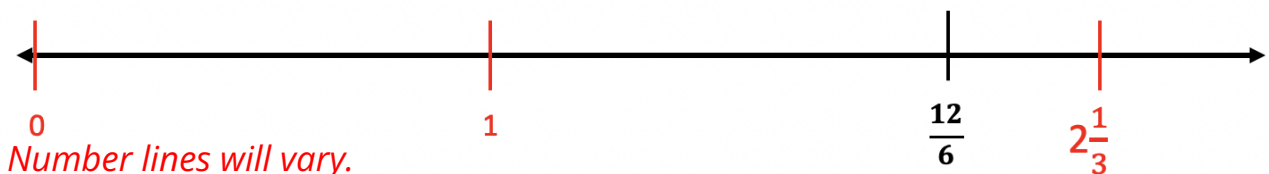


Answers will vary. It looks like Marti took the larger number of blocks and subtracted the smaller number of blocks. 3 blue longs - 1 yellow long = 2 long and 4 yellow cubes - 3 blue cubes = 1 cube. It might help Marti if she divided each of the longs into 5 cubes each, so 18 cubes (or fifths) - 9 cubes (or fifths) = 9 cubes or 9 fifths ($1\frac{4}{5}$)

The equation is $3\frac{3}{5} - 1\frac{4}{5} = \frac{9}{5}$ or $\frac{18}{5} - \frac{9}{5} = \frac{9}{5} = 1\frac{4}{5}$



2. Use the plotted point on this number line to locate $\frac{1}{2} + 1\frac{5}{6}$



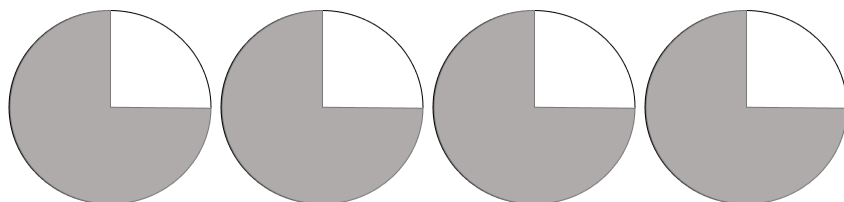


Module 4 Pre-Quiz

1. Logan likes to run on the track. She runs $1\frac{1}{4}$ miles every day for 5 days. How many miles did Logan run in all? Write an equation to show how you got your answer. *Students may show repeated addition in their equation.*

$$5 \times 1\frac{1}{4} = \frac{25}{4} \text{ or } 6\frac{1}{4}$$

2. Write the multiplication expression to represent the model below and solve.



$$4 \times \frac{3}{4} = \frac{12}{4} = 3$$

3. Draw a model to show $6 \times \frac{1}{2}$ and solve.

Models will vary but should show 6 shapes with $\frac{1}{2}$ shaded in each shape.



Module 4 Post-Quiz

1. Brian takes his dog on a walk twice a day for a whole week. Brian and his dog walk $\frac{1}{2}$ mile each time. How many miles did Brian and his dog walk in one week? Write an equation to show how you got your answer.

Twice per day for a week ($2 \times 7 = 14$). $14 \times \frac{1}{2} = 7$ miles

2. Write the multiplication expression to represent the model shown below and solve.



$$6 \times \frac{1}{4} = 1\frac{1}{2}$$

3. Draw a model to show $3 \times \frac{5}{6}$ and solve.

Models will vary but should show 3 shapes with $\frac{5}{6}$ shaded in each shape.



Module 5 Pre-Quiz

1. Naomi and Reily were racing around the block. Naomi ran around the block with a time of 9.67 minutes. Reily's time was 9.4 minutes. Who was faster? How do you know? *Reily ran faster than Naomi because 9.4 minutes is less time than 9.67 minutes.*

2. Compare. Write $>$, $<$, or $=$ in the box.

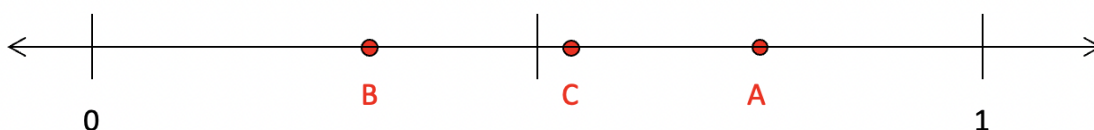
$$\frac{3}{10} \quad \boxed{=} \quad 0.3$$

$$0.72 \quad \boxed{<} \quad 0.75$$

$$\frac{4}{100} \quad \boxed{<} \quad 0.4$$

$$\frac{63}{100} \quad \boxed{>} \quad \frac{6}{10}$$

3. Place a point on the number line for each of the following decimals and label the point. A) 0.75, B) 0.33, and C) 0.55





Module 5 Post-Quiz

1. Arman's house is 0.8 miles from school. Mateo's house is 0.75 miles from school. Who lives closer to school? How do you know? *Mateo lives closer to school because 0.75 miles is less than 0.8 miles.*
2. Compare. Write $>$, $<$, or $=$ in the box.

$$\frac{7}{100} \quad \boxed{<} \quad 0.7$$

$$0.33 \quad \boxed{<} \quad 0.39$$

$$0.6 \quad \boxed{=} \quad \frac{6}{10}$$

$$\frac{44}{100} \quad \boxed{>} \quad \frac{4}{10}$$

3. Place a point on the number line for each of the following decimals and label the point. A) 0.25, B) 0.6, and C) 0.98

