

Student Prompt Book

GRADES
3 to 6

Number and Operations: Fractions

STUDENT PROMPT BOOK

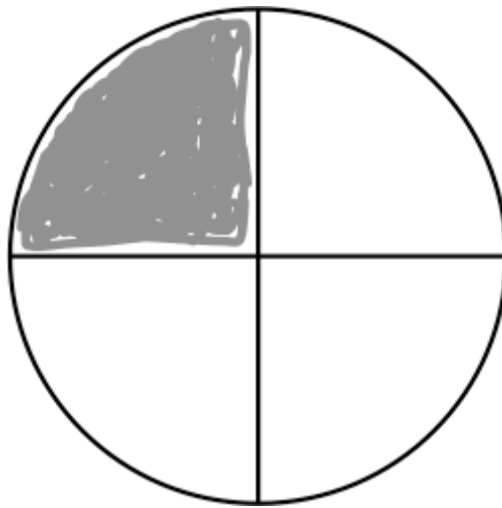
Number and Operations: Fractions

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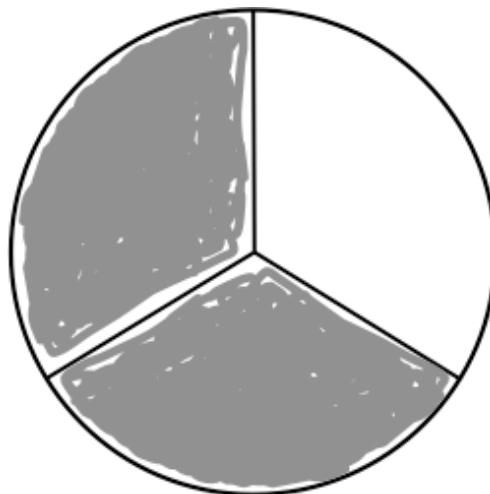
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I. Understands and Compares Fractions

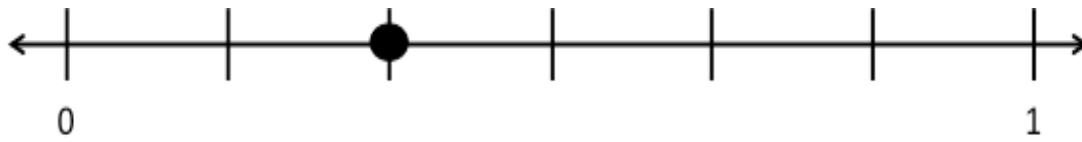
1a. What fraction of the cake (diagram) is shaded?



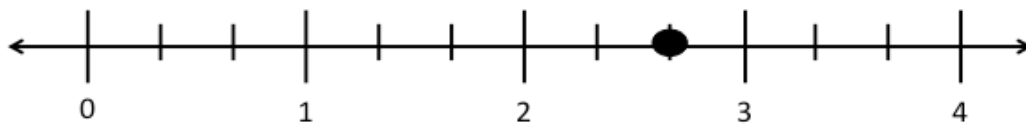
1a. Write a fraction for the shaded areas of the cake (diagram).



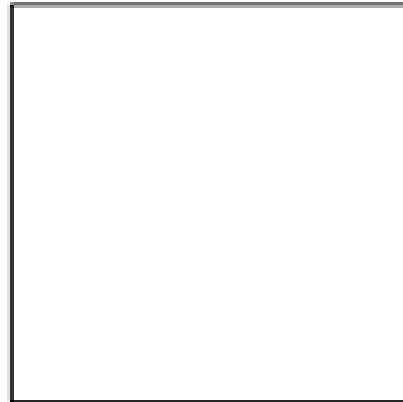
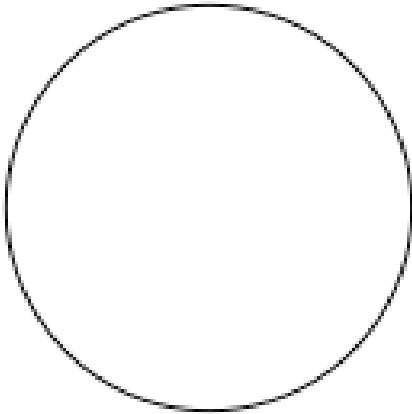
1c. What fraction is marked on the number line?



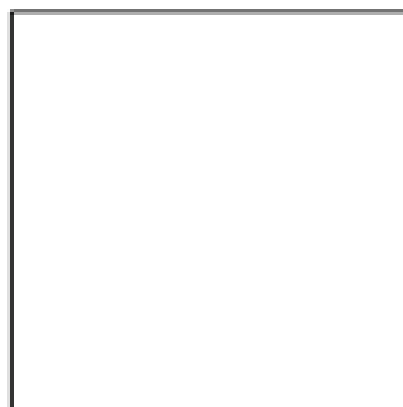
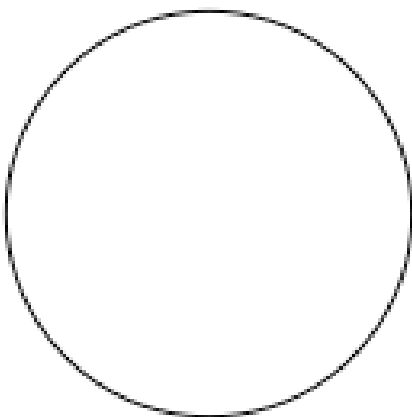
1d. Write a fraction for the point marked on the number line.



2a. Show $\frac{1}{4}$ using either the circle or the square.



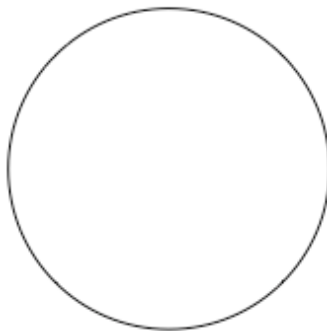
2b. Show $\frac{3}{4}$ using either the circle or the square.



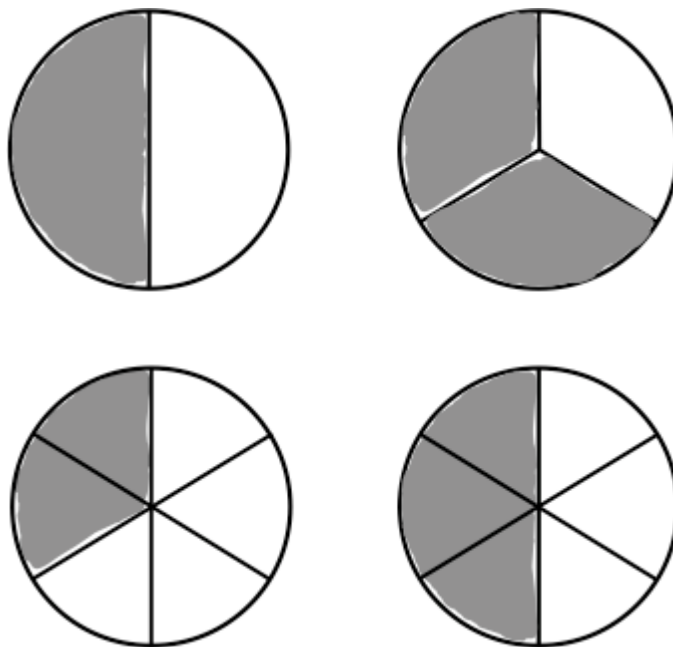
2c. Show $\frac{3}{8}$ on the number line.



2d. Show $\frac{5}{3}$ using the number line, circle, or square.



3a. What do you notice about the diagrams below?



3b. A student claims that $\frac{1}{2} = \frac{3}{6}$. Do you agree or disagree?

4a. Is $\frac{4}{5}$ greater than or less than $\frac{2}{5}$?

4b. Which fraction is greater, $\frac{1}{2}$ or $\frac{1}{4}$?

4c. Which fraction is greater, $\frac{2}{3}$ or $\frac{3}{6}$?

4d. Compare $\frac{3}{5}$ and $\frac{7}{8}$.

II. Adds and Subtracts Fractions

5a. Solve these expressions: $\frac{2}{8} + \frac{4}{8}$ and $\frac{3}{6} - \frac{2}{6}$.

5b. Jamie walked $\frac{2}{4}$ of a mile to her friend's house. Then she walked an additional $\frac{1}{4}$ of a mile home. What is her total distance walked?

5c. Sam has $\frac{5}{6}$ of an orange. He gives $\frac{2}{6}$ of the entire orange to his brother. How much of the orange does he have left?

6a. Solve the equations.

$$\frac{2}{5} + \frac{3}{4} =$$

$$\frac{2}{5} + \frac{3}{5} =$$

6b. Dan has $\frac{3}{4}$ of a bottle of water. He drinks $\frac{3}{8}$ of the bottle. How much of the bottle does he have left?

6c. Brad walked a total of $\frac{7}{8}$ of a mile. Brad walked $\frac{3}{4}$ of a mile when it was raining. How far did Brad walk when it was sunny?

III. Multiplies and Divides Fractions

7a. How much is 5 groups of $\frac{1}{2}$?

7b. If Jared eats $\frac{3}{4}$ of a sandwich three times this week, how many sandwiches will he have eaten altogether?

7c. Jared's family bought 5 boxes of cookies. They eat $\frac{2}{3}$ of 5 boxes of cookies. How much did they eat?

8a. Solve $\frac{1}{2} \times \frac{2}{3} = \underline{\hspace{2cm}}$.

8b. Solve $\frac{4}{5} \times \frac{3}{4} = \underline{\hspace{2cm}}$.

8c. Karen has $\frac{2}{3}$ of her juice box left. Her brother drinks $\frac{3}{4}$ of that. How much of the juice box does her brother drink?

9a. Solve $1 \div \frac{1}{5} = \underline{\hspace{2cm}}$.

9b. Solve $3 \div \frac{1}{5} = \underline{\hspace{2cm}}$.

9c. Solve $\frac{1}{5} \div 3 = \underline{\hspace{2cm}}$.

10.

$$\frac{1}{4} \div \frac{2}{3} =$$