

Comparing Fractions

LCM (Least Common Multiple)

- To compare fractions, find the LCM so you can get common denominators.

> < =

$$\frac{2}{3} \bigcirc \frac{5}{7}$$

$$\begin{array}{cccccc} 3 & 6 & 9 & 12 & 15 & 18 & 21 \\ 7 & 14 & 21 & 28 & 35 & 42 & \end{array}$$

$$\begin{array}{ccc} \times 7 & \downarrow & \downarrow \times 3 \\ \frac{2}{3} & & \frac{5}{7} \end{array}$$

$$\frac{14}{21} \text{ (<) } \frac{15}{21}$$

Butterfly (shortcut we learned after all the hard work)

- cross-multiply and compare

$$2 \times 7 = 14$$

$$3 \times 5 = 15$$

$$\frac{2}{3} \text{ (<) } \frac{5}{7}$$

Compound Fractions

LCM (Least Common Multiple)

- To compare fractions, find the LCM so you can get common denominators.

$\frac{5}{12} > \frac{2}{3}$

$\frac{5}{12}$ $\frac{2}{3}$

↓ $\times 2$ ↓ $\times 4$

$\frac{10}{24}$ $\frac{16}{24}$

3 6 9 12 15 18 21
4 8 12 16 20 24

all the work (cancel out the terms)

cross-multiply (cancel out)

$5 \times 3 = 15$ $2 \times 4 = 8$

$15 > 8$

$\frac{5}{12} > \frac{2}{3}$



Module 4 Assessment

Vocabulary

| Vocabulary |
|---------------|
| benchmark |
| numerator |
| simplest form |

Choose the best term from the box.

1. A _____ is a known size or amount that helps you understand another size or amount. (p. 113)

Concepts and Skills

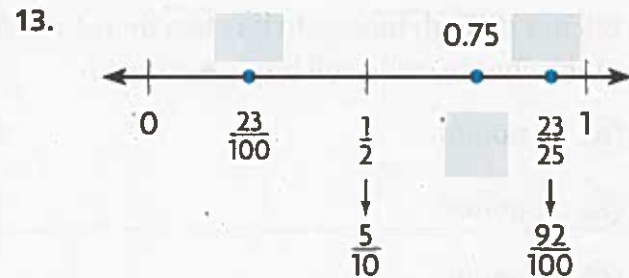
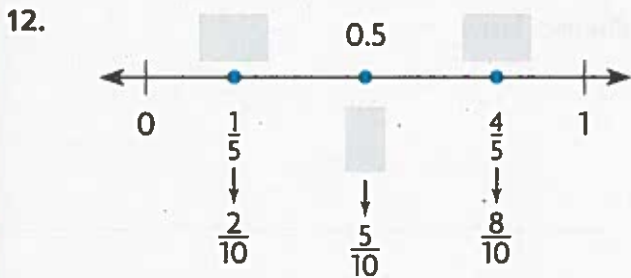
Compare. Write $<$, $>$ or $=$. \blacktriangleright TEKS 4.3.D

- | | | | |
|--|--|--|---------------------------------------|
| 2. $\frac{7}{8} \bigcirc \frac{7}{12}$ | 3. $\frac{10}{12} \bigcirc \frac{5}{6}$ | 4. $\frac{1}{2} \bigcirc \frac{3}{10}$ | 5. $\frac{1}{4} \bigcirc \frac{2}{3}$ |
| 6. $\frac{2}{3} \bigcirc \frac{4}{7}$ | 7. $\frac{5}{14} \bigcirc \frac{10}{14}$ | 8. $\frac{1}{4} \bigcirc \frac{4}{7}$ | 9. $\frac{6}{8} \bigcirc \frac{1}{3}$ |





Write the fractions in order from least to greatest. \blacktriangleright TEKS 4.3.D

- | | |
|---|--|
| 10. $\frac{2}{3}, \frac{3}{4}, \frac{1}{6}$ | 11. $\frac{7}{10}, \frac{4}{5}, \frac{1}{2}, \frac{4}{12}$ |
| _____ | _____ |

Write the fraction or decimal to show their distances from zero. \blacktriangleright TEKS 4.3.G



Fill in the bubble completely to show your answer.

14. Paco needs more than $\frac{3}{8}$ yard of twine to build a model ship. How much twine could he buy?  **TEKS 4.3.D**
- (A) $\frac{3}{10}$ yard
- (B) $\frac{1}{4}$ yard
- (C) $\frac{3}{5}$ yard
- (D) $\frac{1}{8}$ yard
15. Rachel, Nancy, and Diego were in a fishing competition. Rachel's fish was $\frac{7}{8}$ foot long, Nancy's fish was $\frac{1}{4}$ foot long, and Diego's fish was $\frac{1}{2}$ foot long. Which shows the correct comparison of the lengths of Rachel and Diego's fish?  **TEKS 4.3.D**
- (A) $\frac{1}{4}$ foot = $\frac{7}{8}$ foot
- (B) $\frac{1}{2}$ foot > $\frac{7}{8}$ foot
- (C) $\frac{1}{2}$ foot = $\frac{7}{8}$ foot
- (D) $\frac{1}{2}$ foot < $\frac{7}{8}$ foot
16. Amy needs $\frac{6}{8}$ gallon of fruit juice to make punch. She needs an equal amount of sparkling water. How much sparkling water does she need?  **TEKS 4.3.D**
- (A) $\frac{2}{3}$ gallon
- (B) $\frac{1}{2}$ gallon
- (C) $\frac{2}{8}$ gallon
- (D) $\frac{3}{4}$ gallon
17. Bill has enough money to buy less than $\frac{1}{2}$ pound of cheese. How much cheese could Bill buy?  **TEKS 4.3.D**
- (A) $\frac{4}{6}$ pound
- (B) $\frac{5}{8}$ pound
- (C) $\frac{1}{3}$ pound
- (D) $\frac{3}{4}$ pound

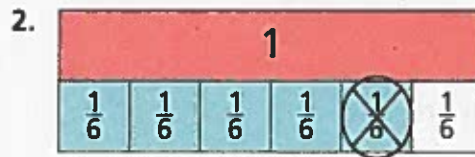
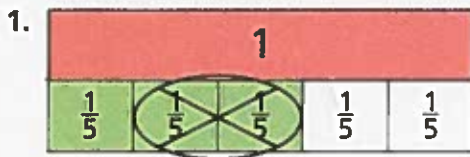
Name _____



Module 5 Assessment

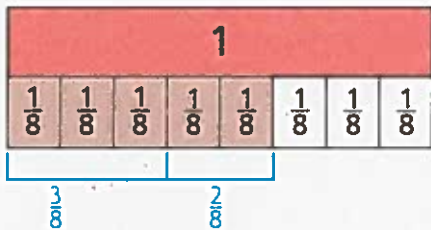
Concepts and Skills

Use the model to write an equation. **TEKS 4.3.E**

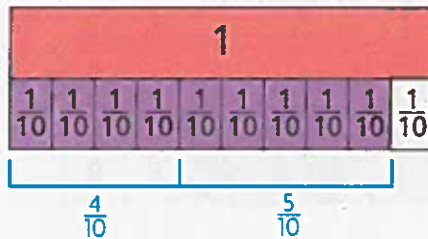


Use the model to find the sum. **TEKS 4.3.E**

3. $\frac{3}{8} + \frac{2}{8} =$ _____

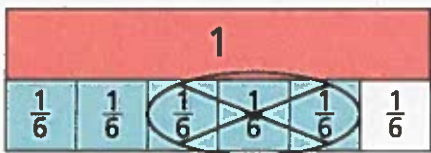


4. $\frac{4}{10} + \frac{5}{10} =$ _____

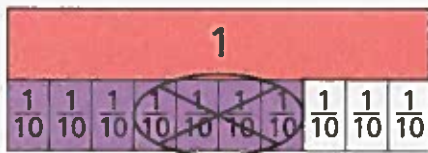


Use the model to find the difference. **TEKS 4.3.E**

5. $\frac{5}{6} - \frac{3}{6} = \frac{\square}{6}$



6. $\frac{7}{10} - \frac{4}{10} = \frac{\square}{10}$



Find the sum or difference. Use fraction strips or a number line. **TEKS 4.3.E**

7. $\frac{9}{12} - \frac{7}{12} =$ _____

8. $\frac{2}{3} + \frac{1}{3} =$ _____


9. $\frac{1}{5} + \frac{3}{5} =$ _____

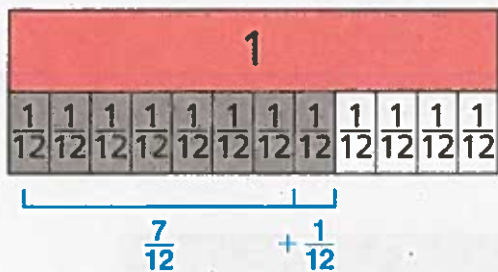
10. $\frac{2}{6} + \frac{2}{6} =$ _____


11. $\frac{4}{4} - \frac{2}{4} =$ _____

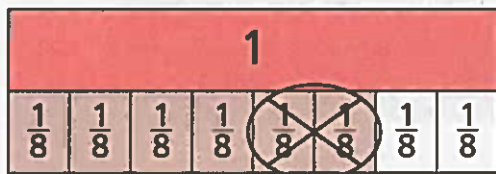
12. $\frac{7}{8} - \frac{4}{8} =$ _____


Fill in the bubble completely to show your answer.

13. Tyrone mixed $\frac{7}{12}$ quart of red paint with $\frac{1}{12}$ quart of yellow paint.
How much paint does Tyrone have in the mixture?  TEKS 4.3.E



- (A) $\frac{8}{24}$ quart
 (B) $\frac{6}{12}$ quart
 (C) $\frac{8}{12}$ quart
 (D) $\frac{12}{12}$ quart
14. Jorge lives $\frac{6}{8}$ mile from school and $\frac{2}{8}$ mile from a ballpark.
How much farther does Jorge live from school than from the ballpark?  TEKS 4.3.E



- (A) $\frac{4}{16}$ mile
 (B) $\frac{4}{8}$ mile
 (C) $\frac{8}{8}$ mile
 (D) 8 miles
15. Eloise hung artwork on $\frac{2}{5}$ of a bulletin board. She hung math papers on $\frac{1}{5}$ of the same bulletin board. What part of the bulletin board does not have artwork or math papers? Use models to help.  TEKS 4.3.E

- (A) $\frac{1}{10}$
 (B) $\frac{3}{5}$
 (C) $\frac{3}{10}$
 (D) $\frac{2}{5}$