# Assignment

## LESSON 2: Getting Closer

## Write

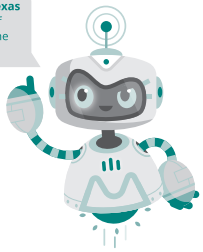
Describe how you could use benchmark fractions to order the fractions $\frac{3}{7}$, $\frac{4}{5}$, $\frac{5}{9}$, and $\frac{1}{8}$ from least to greatest.

## Remember

You can use the benchmark fractions 0, $\frac{1}{2}$, and 1 to determine which fractions are greater or less than other fractions and to estimate sums and differences.

## Practice

Visit **livehint.com/texas** or use this QR code if you need a hint on the Practice questions.



Fill in the missing numerator or denominator so the fraction is close to, but greater than, $\frac{1}{2}$.

1. $\frac{\quad}{15}$
2. $\frac{\quad}{11}$
3. $\frac{7}{\quad}$
4. $\frac{19}{\quad}$
5. $\frac{\quad}{14}$
6. $\frac{\quad}{20}$

Fill in the missing numerator or denominator so the fraction is close to, but less than, 1.

7. $\frac{\quad}{9}$
8. $\frac{9}{\quad}$
9. $\frac{4}{\quad}$
10. $\frac{\quad}{8}$
11. $\frac{12}{\quad}$
12. $\frac{\quad}{13}$

13. Kara walks five days each week. This week she walked $\frac{7}{8}$ mile on Monday, $\frac{3}{5}$ mile on Tuesday, $\frac{4}{10}$ mile on Wednesday, $\frac{1}{10}$ mile on Thursday, and $\frac{9}{10}$ mile on Friday. Use benchmark fractions to estimate the total distance Kara walked this week. Explain your reasoning.

14. The table shows the fraction of an hour that each student spent running laps at track practice one afternoon.

| Student | Fraction of One Hour Spent Running Laps |
|---|---|
| Denise | $\frac{1}{10}$ |
| Patrick | $\frac{2}{3}$ |
| Tyrone | $\frac{11}{12}$ |
| Su Lee | $\frac{3}{4}$ |
| Jasmine | $\frac{7}{15}$ |

a. What benchmark fraction should Coach Arnold use to help her determine which students ran laps for more than 30 minutes and which students ran laps for less than 30 minutes? Explain your reasoning.

b. Which students ran laps for less than 30 minutes? Explain your reasoning.

c. Which students ran laps for more than 30 minutes? Explain your reasoning.

d. Did any of the students run laps for almost an hour? Explain your reasoning.

15. A school participates in a reading contest. The table shows each sixth grade class' portion of the grade's total reading minutes. Use benchmark fractions to help you order the classes from the greatest number of reading minutes to the least number of reading minutes. Explain your reasoning.

| Class | Portion of Reading Minutes |
|---|---|
| Mr. Karlie | $\frac{5}{12}$ |
| Ms. Jacobs | $\frac{1}{18}$ |
| Ms. Suarez | $\frac{4}{9}$ |
| Mr. Mitchell | $\frac{1}{12}$ |

16. What fractions between 0 and 1 other than $\frac{1}{2}$ might be useful benchmark fractions? Explain.

## Stretch

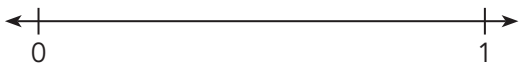
Use benchmark fractions to estimate each product or quotient.

1. $\frac{5}{6} \times \frac{4}{3}$

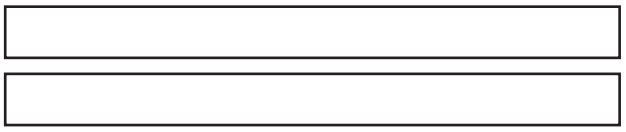
2. $\frac{7}{8} \div \frac{4}{9}$

## Review

1. Label the number line to represent fifths.




2. Use strip diagrams to show that $\frac{2}{3}$ is equivalent to $\frac{8}{12}$.



3. Determine the prime factorization of 42.