## NAME

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Module 4 Fractions, Decimals, Percents, and Factors
Lesson 5 Simplifying and Converting Fractions

Write each fraction in simplest form.

1. $\frac{7}{21}$
2. $\frac{12}{30}$
$\frac{2}{5}$
3. $\frac{9}{36}$
$\frac{1}{4}$
4. $\frac{15}{18}$
$\frac{5}{6}$

Write each improper fraction as a mixed number.
7. $\frac{14}{6}$
$2 \frac{2}{6}=2 \frac{1}{3}$
8. $\frac{30}{8}$
$3 \frac{6}{8}=3 \frac{3}{4}$
10. $\frac{30}{5}$
6
11. $\frac{30}{4}$
$7 \frac{2}{4}=7 \frac{1}{2}$
9. $\frac{12}{5}$
$2 \frac{2}{5}$
12. $\frac{16}{3}$
$5 \frac{1}{3}$

Write each mixed number as an improper fraction.
13. $5 \frac{1}{12}$
14. $12 \frac{1}{2}$
$\frac{25}{2}$
16. $3 \frac{8}{9}$
17. $1 \frac{3}{5}$
18. $\begin{array}{r}9 \frac{2}{3} \\ \frac{29}{3}\end{array}$
$\frac{35}{9}$
$1 \frac{3}{5}$
$\frac{8}{5}$
15. $6 \frac{3}{5}$
$\frac{33}{5}$
$\frac{61}{12}$

## Write each fraction in simplest form.

19. $\frac{72}{114}$
20. $\frac{95}{160}$
$\frac{12}{19}$

## Journal

1. Fill in the missing numerator and explain your work.

$$
\frac{4}{5}=\frac{\square}{35}
$$

2. Explain how to change $4 \frac{1}{3}$ to an improper fraction.
3. James ran two laps around the track in two minutes and 28 seconds. What mixed number, written in simplest form, can be written for the minutes it took him to run those laps? What improper fraction can be written? Explain.

## Cumulative Review

1. Name the fraction shown by the shaded region.

$\frac{7}{12}$
2. What is the ratio of shaded cylinders to the entire group of shapes? Express the ratio in three ways.


8:13 8 to $13 \quad \frac{8}{13}$
$\qquad$
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3. Complete the table.

| Fraction | Decimal | Percent |
| :---: | :---: | :---: |
|  |  | $2 \%$ |
| $\frac{2}{100}$ | 0.02 |  |

5. Find the prime factorization of 250 . $2 \times 5^{3}$
6. Find the Greatest Common Factor (GCF) of 30 and 66. 6
7. Find the LCM of 16,30 , and 42 using prime factorization. 1,680
8. Find the factors of 48 .

1, 2, 3, 4, 6, 8, 12, 16, 24, 48
6. Find the common factors of 28 and 108.
1, 2, 4
8. Find the LCM of 8 and 26 .

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10. Victoria was asked to stack displays of books at the library. The librarian wanted the same number of each type of book in each stack, and she wanted the largest number of stacks that could be made from the books. If there were 42 books about animals, 56 adventure books, and 70 mystery books, how many stacks could Victoria make? How many books would be in each stack?
GCF = 14
14 stacks-12 books in each stack

1. The missing numerator is 28 . To make the denominator change from five to 35 , I multiplied by seven. To keep the fractions equivalent, I multiplied the numerator by seven. $4 \times 7=28$.
2. To change $4 \frac{1}{3}$ to an improper fraction, I multiply the whole number times the denominator and add the numerator. That gives me the numerator of my improper fraction. $4 \times 3+1=13$. The denominator of my improper fraction is the same as the denominator in the mixed number, three. My improper fraction is $\frac{13}{3}$.
3. It took $2 \frac{\mathbf{2 8}}{\mathbf{6 0}}=\mathbf{2} \frac{7}{\mathbf{1 5}}=\frac{\mathbf{3 7}}{\mathbf{1 5}}$ minutes for James to run those laps. James ran for two whole minutes. He also ran 28 seconds of another minute or $\mathbf{2 8}$ out of $\mathbf{6 0}$ seconds. The fraction can be reduced by dividing the numerator and denominator by four.
