

# 2.3

## Write an Improper Fraction as a Mixed Number

### • Example 1

Convert  $\frac{17}{5}$  to a mixed number.

Divide 17 by 5.

$$\begin{array}{r} 3 \\ 5 \overline{)17} \\ \underline{15} \\ 2 \end{array}$$

The quotient is 3 and the remainder is 2.

Thus,  $17 = 3 \times 5 + 2$

$$\begin{aligned} \frac{17}{5} &= \frac{3 \times 5 + 2}{5} \\ &= \frac{3 \times 5}{5} + \frac{2}{5} \\ &= 3 + \frac{2}{5} \end{aligned}$$

In mixed number notation, we write  $\frac{17}{5} = 3\frac{2}{5}$ .

### • • • CHECK YOURSELF 1

Convert  $\frac{32}{5}$  to a mixed number.

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### • Example 2

Convert  $\frac{21}{7}$  to a mixed or a whole number.

Divide 21 by 7.

If there is *no* remainder, the improper fraction is equal to some whole number; in this case 3.

$$\begin{array}{r} 3 \\ 7 \overline{)21} \\ \underline{21} \\ 0 \end{array} \quad \frac{21}{7} = 3$$

### ● ● ● CHECK YOURSELF 2

Convert  $\frac{48}{6}$  to a mixed or a whole number.

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### ● ● ● CHECK YOURSELF ANSWERS

1.  $6\frac{2}{5}$ .      2. 8.
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# 2.3 Exercises

Name \_\_\_\_\_

Section \_\_\_\_\_

Date \_\_\_\_\_

Change to a mixed or a whole number.

1.  $\frac{7}{2}$

2.  $\frac{8}{3}$

3.  $\frac{5}{4}$

4.  $\frac{9}{7}$

5.  $\frac{22}{5}$

6.  $\frac{27}{8}$

7.  $\frac{34}{5}$

8.  $\frac{25}{6}$

9.  $\frac{59}{5}$

10.  $\frac{58}{7}$

11.  $\frac{73}{8}$

12.  $\frac{151}{12}$

13.  $\frac{24}{6}$

14.  $\frac{160}{8}$

15.  $\frac{9}{1}$

16.  $\frac{8}{1}$

17.  $\frac{5}{3}$

18.  $\frac{7}{6}$

19.  $\frac{44}{7}$

20.  $\frac{51}{8}$

21.  $\frac{300}{7}$

22.  $\frac{17}{4}$

23.  $\frac{74}{8}$

24.  $\frac{18}{6}$

## A N S W E R S

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

9. \_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

21. \_\_\_\_\_

22. \_\_\_\_\_

23. \_\_\_\_\_

24. \_\_\_\_\_