

# Chapter Test

Find the prime factorization for each of the following numbers. Express in exponent form. If the number is prime, write *prime*.

1. 15

2. 22

3. 103

4. 42

Find the GCF for each pair of numbers.

5. 26, 30

6. 35, 75

7. 100, 75

8. 27, 72

Find the LCM of each pair of numbers.

9. 8, 36

10. 15, 25

11. 32, 12

12. 16, 64

Evaluate each expression.

13.  $2^4 \times 5$

14.  $5 \times 7^2$

15.  $2^4 \times 3^2 \times 5$

16.  $3^3 \times 4 \times 2^2$

Write  $>$ ,  $<$ , or  $=$  to compare the fractions in each pair.

17.  $\frac{10}{20}$   $\bullet$   $\frac{15}{30}$

18.  $\frac{3}{5}$   $\bullet$   $\frac{12}{24}$

19.  $\frac{70}{175}$   $\bullet$   $\frac{2}{5}$

20.  $\frac{13}{24}$   $\bullet$   $\frac{3}{8}$

21.  $\frac{3}{7}$   $\bullet$   $\frac{5}{12}$

22.  $\frac{5}{9}$   $\bullet$   $\frac{7}{12}$

23.  $\frac{1}{11}$   $\bullet$   $\frac{6}{33}$

24.  $\frac{1}{3}$   $\bullet$   $\frac{12}{36}$

Write each fraction in its simplest form.

25.  $\frac{10}{25}$

26.  $\frac{18}{4}$

27.  $\frac{9}{24}$

28.  $\frac{13}{3}$

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

30.  $\frac{13}{26}$

31.  $\frac{24}{39}$

32.  $\frac{14}{28}$

Write each decimal as a fraction or mixed number in simplest form. Write each fraction or mixed number as a decimal. Use a bar for repeating decimals.

33.  $6\frac{3}{5}$

34. 0.8

35.  $\frac{9}{50}$

36.  $4\frac{2}{3}$

37. 0.36

38.  $\frac{7}{11}$

39. 3.08

40. 3.75

Determine if the following numbers are divisible by 2, 3, 4, 5, 6, 9, or 10.

41. 51

42. 92

43. 138

44. 60

Order from least to greatest on a number line.

45.  $\frac{7}{10}$   $\frac{3}{5}$   $\frac{5}{10}$

46.  $\frac{5}{12}$   $\frac{1}{6}$   $\frac{3}{8}$

47. 1.8  $1\frac{1}{2}$   $\frac{17}{10}$