You will need a ruler and a protractor to complete this test.

1. A whole number is read “sixty-four million, eight hundred two thousand, four hundred thirty-six.” How many digits does it have?
   A 8       B 9
   C 6       D 7

2. Which is equivalent to $\frac{652}{15}$?
   A $\frac{13}{5}$       B $4\frac{1}{10}$
   C $4\frac{1}{3}$       D $2\frac{3}{5}$

3. Which is the place value of the digit 3 in the number 4,630,084.0219?
   A thousands       B ten-thousandths
   C hundred thousands       D ten thousands

4. Which is between 2.19 and 2.20?
   A 2.185       B 2.191
   C 2.201       D 2.225

In 5–7, simplify the expression.

5. $13 + (-5m + 5m) + (-19)$.
   A $10m - 6$       B $-10m + 6$
   C $-6$       D $m - 6$

6. $9\frac{3}{5} + (-7\frac{1}{2}) + 3\frac{3}{4}$.
   A $6\frac{17}{20}$       B $5\frac{17}{20}$
   C $5\frac{3}{5}$       D $4\frac{37}{20}$

7. $-3\frac{3}{10} - (-4\frac{15}{3})$.
   A $-\frac{7}{10}$       B $-1\frac{4}{15}$
   C $-\frac{1}{2}$       D $-\frac{1}{8}$

8. Solve the equation: $p + \frac{3}{4} = \frac{5}{6}$.
   A $-1\frac{11}{12}$       B $-1\frac{7}{12}$
   C $\frac{1}{12}$       D $\frac{7}{12}$
9. Which is equivalent to $\frac{122}{48}$?
   A $\frac{3}{16}$
   B $\frac{1}{8}$
   C $\frac{2}{12}$
   D $\frac{1}{4}$

10. Which is equivalent to $\frac{233}{4}$?
    A $6\frac{1}{4}$
    B $5\frac{3}{4}$
    C $4\frac{1}{4}$
    D $6\frac{3}{4}$

11. Which is the decimal equivalent of sixty-seven ten-thousandths?
    A 67,000
    B 0.067
    C 0.0067
    D 0.00067

12. Jamal walked 2.2 miles on Monday, 3.6 miles on Tuesday, and 4.5 miles on Wednesday. Estimate to the nearest mile the total number of miles Jamal walked over the three days.
    A 9 miles
    B 8 miles
    C 11 miles
    D 10 miles

13. Angles $MEF$ and $NEF$ form a linear pair. If $m\angle MEF$ is 29°, what is $m\angle NEF$?
    A 61°
    B 161°
    C 151°
    D 51°

14. The expression $b + 0 = b$ is true because of which property?
    A Associative Property of Addition
    B Additive Identity Property of Zero
    C Additive Property of Opposites
    D Opposite of Opposites Property

15. Which is equivalent to $3.9 - 9.85 - -0.32$?
    A $3.9 + -9.85 + 0.32$
    B $3.9 - 9.85 - 0.32$
    C $3.9 + 9.85 - 0.32$
    D $3.9 + 9.85 + 0.32$
16. A quadrilateral has angles with measures $35^\circ$, $95^\circ$, $105^\circ$, and $m$. What type of angle is the angle with measure $m$?

A acute  
B obtuse  
C right  
D supplementary

17. Which would be categorical data?

A names of pets  
B height  
C length  
D mass of 10 bricks

In 18 and 19, use the coordinate grid below.

18. Which point is in Quadrant III?

A A  
B B  
C E  
D D

19. Which represents the line on the grid?

A $y = x + 2$  
B $y = x - 2$  
C $y = 2x + 2$  
D $y = 2x - 2$

In 20–24, evaluate the expression.

20. $8 \cdot \frac{3}{4}$

A 27  
B 30  
C $24\frac{3}{4}$  
D 18

21. $3^2 \div 9 + (2^2 \cdot 5) \div 2$

A 11  
B $50\frac{1}{2}$  
C 131  
D 51
Comprehensive Test  Chapters 1–9

22. 30% of 63.4
   A 0.1902  B 19.02  C 1902  D 190.2

23. \( \frac{1}{2} \cdot \frac{-3}{4} \cdot \frac{8}{9} \)
   A \( \frac{6}{17} \)  B \( \frac{2}{9} \)  C \( \frac{-1}{3} \)  D \( \frac{-11}{17} \)

24. \(-381 \div -9\)
   A 42.3  B 42.34  C 42.3  D 42

25. What is the remainder when 83 is divided by 7?
   A 3  B 4  C 5  D 6

26. Which is not a factor of 434?
   A 2  B 7  C 31  D 13

27. Which is not a prime number?
   A 163  B 149  C 177  D 181

For 28 and 29, evaluate the expression.

28. \( \frac{5}{3} + \frac{25}{18} \)
   A \( 2\frac{1}{3} \)  B \( 1\frac{1}{5} \)  C \( 2\frac{17}{54} \)  D \( 1\frac{1}{60} \)

29. \( \frac{3}{4} + \frac{\frac{7}{8 + \frac{7}{12}}} \)
   A \( \frac{18}{29} \)  B \( \frac{1}{2} \)  C \( 1\frac{1}{4} \)  D \( \frac{29}{32} \)
For 30 and 31, solve for the variable.

30. \(3j = \frac{9}{10}\)
   - A \(\frac{7}{10}\)
   - B \(\frac{2}{3}\)
   - C \(\frac{3}{10}\)
   - D \(\frac{2}{10}\)

31. \(\frac{18}{p} = \frac{54}{25}\)
   - A \(\frac{43}{54}\)
   - B \(\frac{81}{3}\)
   - C \(\frac{82}{3}\)
   - D \(\frac{3}{25}\)

32. What is the surface area of a cube with edge length 3.5 cm?
   - A 10.5 cm\(^2\)
   - B 73.5 cm\(^2\)
   - C 42.875 cm\(^2\)
   - D 21 cm\(^2\)

33. How far does a 22-inch diameter wheel travel in one revolution? Round your answer to the nearest hundredth of an inch.
   - A 69.12 in.
   - B 138.23 in.
   - C 1,520.53 in.
   - D 380.13 in.

In 34 and 35, a coffee can is 8 inches tall and has a diameter of 6.5 inches. Round your answers to the nearest tenth of an inch.

34. The can’s label completely covers the side of the can. How much area does the label cover?
   - A 265.5 in\(^2\)
   - B 326.7 in\(^2\)
   - C 52 in\(^2\)
   - D 163.4 in\(^2\)

35. What is the volume of the coffee can?
   - A 265.5 in\(^3\)
   - B 326.7 in\(^3\)
   - C 52 in\(^3\)
   - D 163.4 in\(^3\)