Chapters 1–6 Midterm Mastery Test

Directions Circle the letter of the best answer.

1. What is 402,388 rounded to the nearest thousand?

A 400,000

B 402,000

C 402,400

D 403,000

2. The greatest common factor of 36 and 60 is

A 6

B 9

C 12

D 15

3. $\frac{2}{5} \div \frac{5}{8} =$ ___

A $\frac{1}{4}$

B $\frac{4}{1}$

C $\frac{25}{16}$

D $\frac{16}{25}$

4.
$$\begin{array}{r} 3\frac{1}{8} \\ -\,1\frac{3}{4} \\ \hline \end{array}$$

A $1\frac{3}{8}$

B $1\frac{1}{2}$

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

D $2\frac{1}{2}$

5. How is 515,000,000 written in scientific notation?

A 515×10^6

B 5.15×10^6

C 5.15×10^8

D 5.15×10^9

6. Solve for n: $\frac{8}{15} = \frac{24}{n}$

A $n = 45$

B $n = 31$

C $n = 12.8$

D $n = 5$

7. Leila can ride her bicycle 8 miles in 1 hour. At this rate, how long will it take Leslie to ride 20 miles?

A 12 hours

B 2.5 hours

C 2 hours

D 1.5 hours

8. Alia took a group to dinner for her mother's 75th birthday. The bill before tip was $180.00. Alia wants to leave a 15% tip for the waiter. Which of the following is closest to the total amount Alia will pay?

A $190.00

B $195.00

C $200.00

D $205.00

Chapters 1–6 Midterm Mastery Test, continued

9. Write the name of the place of the underlined digit.

4<u>1</u>6 _____

10. Write this numeral in words:

601,012 _____

Directions Round these numbers to the nearest:

11. tens

452

_____

12. hundreds

1,684

_____

13. thousands

24,995

_____

Directions Solve these problems.

14. To 13 add 210 and 3,567. _____

15. Mia has 1,756 rocks in her collection. She gives away 588 to her cousin. How many rocks does she have left? _____

16. 433 times 306. _____

17. Divide 53 into 21,730. _____

18. Circle the prime numbers.

2 3 6 27 57 53 117 45

19. Circle the composite numbers.

4 27 57 101 49 31 59 9

20. List the set of all factors of F_{12}. _____

21. What is the LCM of (6, 8)? _____

22. Find the GCF of the pair of numbers (27, 36). _____

23. Tell if the first fraction is less than or greater than the second fraction. Use $<$ or $>$.

$\frac{7}{16}$ $\frac{3}{7}$

Chapters 1–6 Midterm Mastery Test, continued

24. What is this fraction in simplest form?

$\frac{75}{156}$ _____

25. Rename this mixed number as an improper fraction.

$5\frac{13}{29}$ _____

26. Rename this improper fraction as a mixed number in simplest form.

$\frac{192}{54}$ _____

Directions Solve the following problems.

27. $6\frac{1}{8} \times 14\frac{2}{5}$ _____

28. $6\frac{1}{2} \div \frac{1}{2}$ _____

29. Jeff has $\frac{9}{16}$ of a pizza. Marta gives him $\frac{3}{8}$ of her pizza. How much of a pizza does Jeff have? _____

30. $23 - 14\frac{2}{7}$ _____

31. Write this number in words.

103.604 _____

32. Write whether the first decimal is greater than or less than the second. Use $<$ or $>$.

6.39 6.391 _____

Directions Solve these problems.

33. $16 + 42.009 - 5.7 + 0.94$ _____

34. 32.9×0.0303 _____

35. $1{,}190.845 \div 410$ _____

36. Write this number in scientific notation.

6,403,228,000 _____

Chapters 1–6 Midterm Mastery Test, continued

37. Harold checked out 19 books from the library. Magda and Teri checked out 57 books. Write a ratio for the number of books as a fraction in simplest form. _____

38. Write a ratio to compare these amounts.

5 days to 3 weeks _____

39. Tell whether this ratio forms a proportion. Use $=$ or $\neq$.

$\frac{12}{8}$ $\frac{9}{6}$

40. The scale of a model is 15 inches to 136 inches. If the real object is 17 inches, how many inches long is the model? _____

41. If one Euro equals 85¢, how many U.S. dollars are in 5,016 Euros? _____

42. One U.S. dollar equals $1.60 Canadian dollars. How many Canadian dollars are in $250.00? _____

43. Rename this percent as a decimal.

14% _____

44. Rename this percent as a fraction in simplest form.

26% _____

Directions Rename each as a percent.

45. 0.403 _____

46. $16\frac{1}{2}$ _____

47. $\frac{3}{20}$ _____

48. Sharon's goal is to walk 80 miles this summer. So far, she has walked 14 miles. What percent of her goal has she walked? _____

49. Jake eats at a restaurant. His salad costs $3.00, the main course costs $15.95, his dessert costs $4.50, and his beverage costs $1.99. What is Jake's total bill if he adds a 15% tip? _____

50. Maya buys a sofa for $563.00. She pays $47.00 down. She will pay the remainder in 12 equal payments. How much will each payment be? _____