

Henke's Med-Math Dosage Calculation Preparation & Administration 9th Edition Test Bank

CHAPTER 1, Arithmetic Needed for Dosage

1. Reduce the following fraction to lowest terms.

$$54/81 = \underline{\hspace{2cm}}$$

ANS: 2/3

PTS: 1 MSC: Practice Problems

2. Reduce the following fraction to lowest terms.

$$105/135 = \underline{\hspace{2cm}}$$

ANS: 7/9

PTS: 1 MSC: Practice Problems

3. Reduce the following fraction to lowest terms.

$$39/65 = \underline{\hspace{2cm}}$$

ANS: 3/5

PTS: 1 MSC: Practice Problems

4. Change the following improper fraction to a whole or mixed number.

$$325/16 = \underline{\hspace{2cm}}$$

ANS: 20 5/16

PTS: 1 MSC: Practice Problems

5. Change the following improper fraction to a whole or mixed number.

$$1,500/100 = \underline{\hspace{2cm}}$$

ANS: 15

PTS: 1 MSC: Practice Problems

6. Change the following improper fraction to a whole or mixed number.

$$193/62 = \underline{\hspace{2cm}}$$

ANS: 3 7/62

PTS: 1 MSC: Practice Problems

7. Change the following mixed number to an improper fraction.

$$12 \frac{1}{8} = \underline{\hspace{2cm}}$$

ANS: 97/8

PTS: 1 MSC: Practice Problems

8. Change the following mixed number to an improper fraction.

$$29 \frac{2}{3} = \underline{\hspace{2cm}}$$

ANS: 89/3

PTS: 1 MSC: Practice Problems

9. Perform the indicated operation and reduce to lowest terms.

$$1/12 + 6/12 + 5/12 = \underline{\hspace{2cm}}$$

ANS: 1

PTS: 1 MSC: Practice Problems

10. Perform the indicated operation and reduce to lowest terms.

$$3/8 \frac{1}{3} = \underline{\hspace{2cm}}$$

ANS: $1/24$

PTS: 1 MSC: Practice Problems

11. Perform the indicated operation and reduce to lowest terms.

$$4/5 \cdot 5/16 = \underline{\hspace{2cm}}$$

ANS: $1/4$

PTS: 1 MSC: Practice Problems

12. Perform the indicated operation and reduce to lowest terms.

$$1/12 \cdot 1/15 = \underline{\hspace{2cm}}$$

ANS: $1/180$

PTS: 1 MSC: Practice Problems

13. Perform the indicated operation and reduce to lowest terms.

$$3/5 \cdot 5 = \underline{\hspace{2cm}}$$

ANS: $3/25$

PTS: 1 MSC: Practice Problems

14. Perform the indicated operation and reduce to lowest terms.

$$1/100 \cdot 1/200 = \underline{\hspace{2cm}}$$

ANS: 2

PTS: 1 MSC: Practice Problems

15. Indicate which fraction is the largest.

$$1/100, 1/150, 1/200: \underline{\hspace{2cm}}$$

ANS: $1/100$

PTS: 1 MSC: Practice Problems

16. Arrange the following fractions from smallest to largest.

$$1/6, 1/5, 1/8, 1/4, 1/3: \underline{\hspace{4cm}}$$

ANS: $1/8, 1/6, 1/5, 1/4, 1/3$

PTS: 1 MSC: Practice Problems

17. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$1/5 + 1/2 + 1/4 = \underline{\hspace{2cm}}$$

ANS: $19/20$

PTS: 1 MSC: Practice Problems

18. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$16 \cdot 5/6 \cdot 14 \cdot 3/8 = \underline{\hspace{2cm}}$$

ANS: $2 \cdot 11/24$

PTS: 1 MSC: Practice Problems

19. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$6 \cdot 10/12 \cdot 15/3 = \underline{\hspace{2cm}}$$

ANS: $34 \cdot 1/6$

PTS: 1 MSC: Practice Problems

20. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$56 \cdot 9/20 = \underline{\hspace{2cm}}$$

ANS: $124 \cdot 4/9$

PTS: 1 MSC: Practice Problems

21. Indicate the largest number in the following set.

$\frac{5}{6}, \frac{5}{8}$: _____

ANS: $\frac{5}{6}$

PTS: 1 MSC: Practice Problems

22. Indicate the largest number in the following set.

$\frac{1}{30}, \frac{1}{4}, \frac{1}{150}$: _____

ANS: $\frac{1}{4}$

PTS: 1 MSC: Practice Problems

23. Reduce the following fraction to lowest terms.

$\frac{34}{102} =$ _____

ANS: $\frac{1}{3}$

PTS: 1 MSC: Practice Problems

24. Reduce the following fraction to lowest terms.

$\frac{60}{1200} =$ _____

ANS: $\frac{1}{20}$

PTS: 1 MSC: Practice Problems

25. Express the following improper fraction as a mixed number. Reduce to lowest terms.

$\frac{24}{18} =$ _____

ANS: $1 \frac{1}{3}$

PTS: 1 MSC: Practice Problems

26. Express the following improper fraction as a mixed number. Reduce to lowest terms.

$\frac{15}{13} =$ _____

ANS: $1 \frac{2}{13}$

PTS: 1 MSC: Practice Problems

27. Change the following mixed number to an improper fraction.

$9 \frac{1}{9} =$ _____

ANS: $\frac{82}{9}$

PTS: 1 MSC: Practice Problems

28. Change the following mixed number to an improper fraction.

$6 \frac{7}{10} =$ _____

ANS: $\frac{67}{10}$

PTS: 1 MSC: Practice Problems

29. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$6 \frac{5}{16} + 5 \frac{3}{16} =$ _____

ANS: $11 \frac{1}{2}$

PTS: 1 MSC: Practice Problems

30. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$4 \frac{3}{10} + 2 \frac{2}{10} =$ _____

ANS: $6 \frac{1}{2}$

PTS: 1 MSC: Practice Problems

31. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$3 \frac{1}{5} + 3 \frac{2}{3} + 2 \frac{1}{2} =$ _____

ANS: $12 \frac{11}{30}$

PTS: 1 MSC: Practice Problems

32. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$1 \frac{2}{4} + 3 \frac{1}{3} = \underline{\hspace{2cm}}$$

ANS: $4 \frac{5}{6}$

PTS: 1 MSC: Practice Problems

33. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$15/21 - 10/21 = \underline{\hspace{2cm}}$$

ANS: $5/21$

PTS: 1 MSC: Practice Problems

34. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$8/16 - 1/4 = \underline{\hspace{2cm}}$$

ANS: $1/4$

PTS: 1 MSC: Practice Problems

35. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$14 \frac{5}{9} = \underline{\hspace{2cm}}$$

ANS: $13 \frac{4}{9}$

PTS: 1 MSC: Practice Problems

36. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$6 \frac{1}{4} - 2 \frac{5}{8} = \underline{\hspace{2cm}}$$

ANS: $3 \frac{5}{8}$

PTS: 1 MSC: Practice Problems

37. Perform the indicated operation with fractions. Reduce to lowest terms as indicated.

$$5 \frac{1}{3} - 1 \frac{7}{12} = \underline{\hspace{2cm}}$$

ANS: $3 \frac{3}{4}$

PTS: 1 MSC: Practice Problems

38. A client received $2 \frac{1}{2}$ ounces (oz) of medication at breakfast and $2 \frac{1}{3}$ oz at lunch. How many oz of medication has the client received? _____

ANS: $4 \frac{5}{6}$ oz

PTS: 1 MSC: Practice Problems

39. A client weighed $147 \frac{1}{2}$ pounds (lb), lost $6 \frac{3}{4}$ lb due to illness. How many pounds does the client now weigh? _____

ANS: $140 \frac{3}{4}$ lb

PTS: 1 MSC: Practice Problems

40. A client drank $\frac{2}{3}$ of a 12 ounce (oz) can of seltzer water. How many ounces of seltzer water did the client drink? _____

ANS: 8 oz

PTS: 1 MSC: Practice Problems

41. A client is supposed to drink a 10 ounce (oz) bottle of magnesium citrate before an X-ray study. The client was able to drink 4 oz. How much of the magnesium citrate remains? (Express answer as a fraction reduced to lowest terms.) _____

ANS: $\frac{2}{5}$ bottle

PTS: 1 MSC: Practice Problems

42. The nurse is instructed to give a client $\frac{2}{3}$ of a cup of solution. If 1 cup = 240 milliliters (mL), how many mL should the nurse administer?

42. Change the following to a decimal. Carry division three places as indicated. Do not round off.

$$5/18 = \underline{\hspace{2cm}}$$

ANS: 0.277

PTS: 1 MSC: Practice Problems

43. Change the following decimal to a fraction. Reduce to lowest terms if indicated.

$$7.025 = \underline{\hspace{2cm}}$$

ANS: $7 \frac{1}{40}$

PTS: 1 MSC: Practice Problems

44. Change the following decimal to a fraction. Reduce to lowest terms if indicated.

$$0.0001 = \underline{\hspace{2cm}}$$

ANS: $1/10,000$

PTS: 1 MSC: Practice Problems

45. Identify the decimal with the largest value in the following set.

$$0.6, 0.128 = \underline{\hspace{2cm}}$$

ANS: 0.6

PTS: 1 MSC: Practice Problems

46. Identify the decimal with the largest value in the following set.

$$0.7, 0.67, 0.86: \underline{\hspace{2cm}}$$

ANS: 0.86

PTS: 1 MSC: Practice Problems

47. Round off the following decimal to the nearest tenth.

$$3.539 = \underline{\hspace{2cm}}$$

ANS: 3.5

PTS: 1 MSC: Practice Problems

48. Round off the following decimal to the nearest thousandth.

$$0.6253 = \underline{\hspace{2cm}}$$

ANS: 0.625

PTS: 1 MSC: Practice Problems

9. Perform the indicated operation with decimals.

$$49.1 - 0.009 = \underline{\hspace{2cm}}$$

ANS: 64.091

PTS: 1 MSC: Practice Problems

50. Perform the indicated operation with decimals.

$$0.123 + 0.4 = \underline{\hspace{2cm}}$$

ANS: 0.523

PTS: 1 MSC: Practice Problems

51. Perform the indicated operation with decimals.

$$0.46 - 0.17 = \underline{\hspace{2cm}}$$

ANS: 0.0782

PTS: 1 MSC: Practice Problems

52. Divide the following decimal. Express answer to nearest hundredth.

$$0.1 \overline{)0.375} = \underline{\hspace{2cm}}$$

ANS: 0.27

PTS: 1 MSC: Practice Problems

53. Change the following to a decimal.

1.25% = _____

ANS: 0.0125

PTS: 1 MSC: Practice Problems

54. Indicate the largest number in the following set.

0.75, 0.749: _____

ANS: 0.75

PTS: 1 MSC: Practice Problems

55. Indicate the largest number in the following set.

0.001, 1.25, 1.09: _____

ANS: 1.25

PTS: 1 MSC: Practice Problems

56. Perform the indicated operation with decimals.

$0.98 + 0.76 =$ _____

ANS: 1.74

PTS: 1 MSC: Practice Problems

57. Perform the indicated operation with decimals.

$9.123 - 6.055 =$ _____

ANS: 3.068

PTS: 1 MSC: Practice Problems

58. Perform the indicated operation with decimals.

$60 \div 0.012 =$ _____

ANS: 5,000

PTS: 1 MSC: Practice Problems

59. Perform the indicated operation with decimals.

$66.66 \times 3.33 =$ _____

ANS: 221.9778

PTS: 1 MSC: Practice Problems

60. Change the following decimal to a fraction. Reduce to lowest terms if indicated.

0.010 = _____

ANS: $\frac{1}{100}$ _____

ANS: 160 mL

Chapter 2 Metric and Household Systems of Measurement

MULTIPLE CHOICE

1. 0.6 mg is equivalent to:

- a. 600 mcg c. 60 mcg
- b. 6 mcg d. 0.0006 mcg

ANS: A PTS: 1 MSC: General

2. The metric prefix for 0.001 is:

- a. micro. c. kilo.

b. centi. d. milli.

ANS: D PTS: 1 MSC: General

3. 60 mg is equivalent to:

a. 6 g c. 0.06 g

b. 0.6 g d. 0.0006 g

ANS: C PTS: 1 MSC: General

4. Three and one-half kilograms

a. 3.5 kg c. 3 kg

b. 3.05 kg d. 3.5 kg

ANS: D PTS: 1 MSC: General

5. Eight-tenths of a milliliter

a. 8/10 ml c. 0.8 mL

b. .8 mL d. ml 0.8

ANS: C PTS: 1 MSC: General

6. Six-tenths of a liter

a. 0.6 L c. 0.60 L

b. 6/10 L d. 0.60 l

ANS: A PTS: 1 MSC: General

7. One hundred forty-five micrograms

a. 145 mg c. 145.0 mg

b. 0.145 mcg d. 145 mcg

ANS: D PTS: 1 MSC: General

MULTIPLE RESPONSE

1. The metric system (select all that apply):

a. is also called the fractional system.

b. is used most often in medication administration.

c. has units of measure such as grain and drop.

d. is based on the decimal system.

e. is gradually replacing the apothecary and household systems.

f. expresses quantities using Arabic numbers and decimals.

ANS: B, D, E PTS: 1 MSC: General

2. The liter is (select all that apply):

a. a unit of volume in the metric system.

b. smaller than a milliliter.

c. equivalent to 1,000 milliliters.

d. abbreviated using a small case l.

e. abbreviated with a capital L.

f. the basic unit for weight.

ANS: A, C, E PTS: 1 MSC: General

COMPLETION

1. Complete the following sentence with the correct word(s).

The units of the metric system are as follows: _____ (length),
_____ (volume), and _____ (weight).