

**ASSESSMENT TEST -- Readiness for Math A (Elementary Algebra)
Topics And Sample Questions**

COMPUTATION

1.
$$\begin{array}{r} 48 \\ + 6 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 94 \\ - 69 \\ \hline \end{array}$$

3.
$$\begin{array}{r} \$4.98 \\ \times 3 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 826 \\ - 349 \\ \hline \end{array}$$

5.
$$7 \overline{) 4872}$$

6. $\frac{1}{6}$ of 30 = _____

7. $2 - \underline{\hspace{2cm}} = \frac{1}{4}$

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

9.
$$\begin{array}{r} 229 \\ 5584 \\ 63 \\ + 9308 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 908 \\ \times 48 \\ \hline \end{array}$$

11. Subtract
$$\begin{array}{r} 10 \frac{1}{4} \\ - 8 \frac{2}{3} \\ \hline \end{array}$$

12. Add
$$\begin{array}{r} 6 \frac{1}{4} \\ 5/8 \\ + 3 \frac{1}{2} \\ \hline \end{array}$$

13. Write as a decimal:
 $82 \frac{1}{2}\% = \underline{\hspace{2cm}}$

14. Find the average:
54, 16, 95, 39, 28, 9, 60
Answer _____

15. Write as a percent:
 $\frac{3}{8} = \underline{\hspace{2cm}}$

16. $2 \frac{1}{2}$ ft. = _____

17. $2.5 \overline{) 355.95}$

18. $3^4 = \underline{\hspace{2cm}}$

19. Add:
$$\begin{array}{r} 3 \text{ ft.} \quad 6 \text{ in.} \\ 9 \text{ ft.} \quad 7 \text{ in.} \\ + 7 \text{ ft.} \quad 11 \text{ in.} \\ \hline \end{array}$$

20. & 21. Write as a common fraction in the lowest terms:
20. $0.075 = \underline{\hspace{2cm}}$ 21. $68\% = \underline{\hspace{2cm}}$

22. $6 \times 5 \frac{7}{8} = \underline{\hspace{2cm}}$

23. 15% of 175 = _____

24. $0.39 \div 1 \frac{1}{5} = \underline{\hspace{2cm}}$

25. 87 sq. ft. = _____

APPLIED ARITHMETIC

1. The perimeter of a rectangular garden measured 80 feet long and 20 feet wide. How many feet of bricks would it take to enclose the garden?
2. If you pay \$6 each for 6 tapes and \$3 each for 3 others, how much change should you get from a \$50 bill?
3. The temperature was 10° below 0° in Minnesota while at the same time it was 70° above 0° in California. What was the difference in temperatures between the two states?
4. A child is $\frac{1}{4}$ of the height of a room. If the room is 8 feet high, how tall is the child?
5. Theater tickets cost \$5 each, but if 5 people enter as a group then the fifth person is allowed in free. If 5 people share a group price, how much does each have to pay?
6. If a \$100 item is offered at a 10% discount, what is the new price?
7. A mechanic earns \$20 an hour and is paid \$2 an hour overtime for work after 5 p.m. How much would he earn if he works from 1 p.m. to 7 p.m.?
8. What is the annual amount of interest on an investment of \$15.00 at 10%?
9. A student failed 15 questions out of 40. What percent did he fail?

10. Sit cost \$110 with a 10% tax included. What was the price without tax?
11. Jack spent $\frac{1}{2}$ of his allowance for candy and $\frac{1}{4}$ for ice cream. How much did he have left?

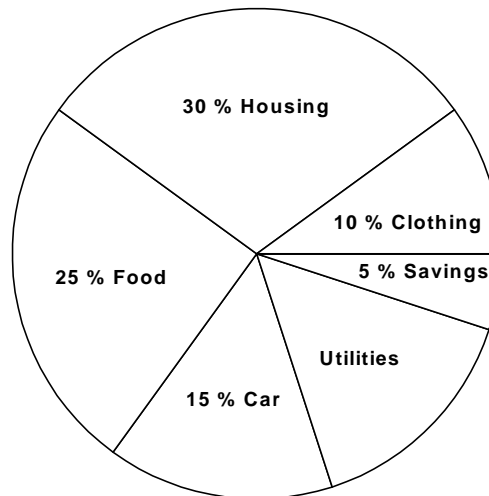
Use this chart for problems 12, 13, and 14

| | Cost per 100 sheets 0-500 | Cost per 100 sheets 500-1,000 | Cost per 100 sheets Over 1,000 |
|-------------|---------------------------------|-------------------------------------|--------------------------------------|
| Plain Paper | \$5.00 | \$3.00 | \$1.00 |
| Color Paper | \$6.00 | \$4.00 | \$1.50 |

12. How much does it cost to print 300 sheets on plain paper?
13. How much does it cost to print 600 sheets on colored paper?
14. How much does it cost to print 1,000 sheets on plain paper if there is an extra \$2 charge for typesetting?
15. If in a blueprint one inch represents 100 feet, then how many inches are needed to represent 250 feet?
16. If an item is on sale at four for \$1, how much will 10 of them cost?

Use this graph for problems 18, 19, and 20.

The graph represents the budget of a family with an income of \$1,500 per month.



18. How much was the monthly cost for food?
19. One month their food cost took an extra 5% of the budget. They decided to take it out of the amount for clothing. What amount did they have left for clothing?
20. How much was budgeted per month for utilities?

IF YOU ARE NOT SURE HOW TO WORK THE PROBLEMS, YOU SHOULD CONSULT A BASIC MATH BOOK. Topics included are: basic arithmetic, the use of fractions, percents, and decimals in applied problems.