

**ASSESSMENT TEST – READINESS FOR MATH A**  
**Topics and Sample Questions**

**1. Computation**

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

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

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

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

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

F.  $1/6$  of 30 = \_\_\_\_\_

G.  $2 - \underline{\hspace{1cm}} = 1/4$

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

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

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

K. Subtract  

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

L. Add  

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

M. Write as a decimal:

$82 \frac{1}{2}\% = \underline{\hspace{1cm}}$

N. Find the average:

54, 16, 95, 39, 28, 9, 60

Answer \_\_\_\_\_

O. Write as a percent:

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

P.  $2 \frac{1}{2}$  ft. = \_\_\_\_\_

Q. 
$$2.5 \overline{)355.95}$$

R.  $3^4 = \underline{\hspace{1cm}}$

S. Add:

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

T. & U. Write as a common fraction in the lowest terms:

T.  $0.075 = \underline{\hspace{1cm}}$

U.  $68\% = \underline{\hspace{1cm}}$

V.  $6 \times 5 \frac{7}{8} = \underline{\hspace{1cm}}$

W.  $15\%$  of 175 = \_\_\_\_\_

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

Y. 87 sq. ft. = \_\_\_\_\_ sq. yds.

**2. Applied arithmetic**

- A. 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?
- B. If you pay \$6 each for 6 tapes and \$3 each for 3 others, how much change should you get from a \$50 bill?
- C. The temperature was  $10^\circ$  below  $0^\circ$  in Minnesota while at the same time it was  $70^\circ$  above  $0^\circ$  in California. What was the difference in temperatures between the two states?
- D. A child is  $1/4$  of the height of a room. If the room is 8 feet high, how tall is the child?
- E. 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?

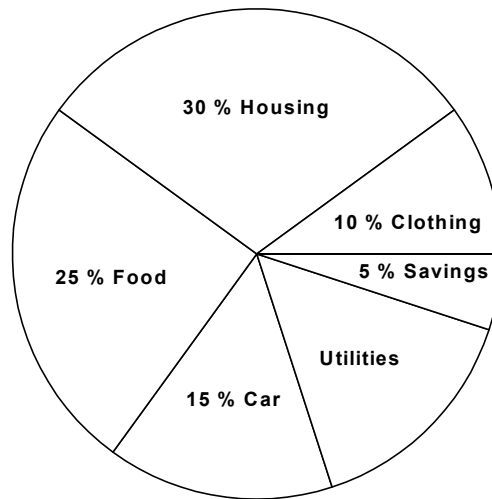
- F. If a \$100 item is offered at a 10% discount, what is the new price?
- G. A mechanic earns \$20 an hour and is paid \$2 an hour overtime for work after 5 p.m. How much would he earn if he works from 1 p.m. to 7 p.m.?
- H. What is the annual amount of interest on an investment of \$15.00 at 10%?
- I. A student failed 15 questions out of 40. What percent did he fail?
- J. Sit cost \$110 with a 10% tax included. What was the price without tax?
- K. 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 L, M, and N	Cost per	Cost per	Cost per
	100 sheets	100 sheets	100 sheets
	0-500	500-1,000	Over 1,000
Plain Paper	\$5.00	\$3.00	\$1.00
Color Paper	\$6.00	\$4.00	\$1.50

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

Use this graph for problems Q, R, and S.

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



- Q. How much was the monthly cost for food?
- R. 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?
- S. 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.