

BASIC MATH CALCULATIONS

1. **Multiply:**

$$\begin{array}{r} .016 \\ \underline{.016} \\ .000256 \end{array} \quad \begin{array}{r} .016 \\ \underline{.016} \\ 096 \\ 016 \\ \underline{000} \\ .000256 \end{array}$$

Must add additional 0 because there are 6 decimal points in the problem

2. **Divide:**

$$2.25 \div .75 = 3$$

$$\begin{array}{r} 3 \\ .75 \overline{) 225} \\ \underline{225} \\ 0 \end{array}$$

Change to whole number by moving decimal point over two spaces to the right (2.25 to 225)

3. $1.78 - .7 = \mathbf{1.08}$

$$\begin{array}{r} 1.78 \\ - .70 \\ \hline 1.08 \end{array}$$

Note how .7 is set up in order to align the decimal points so that you can perform subtraction

4. $1/2 + 1/4 = 3/4$

$$\text{LCD} = 4$$

$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

5. $\frac{11}{4} = \frac{77}{?}$ (28)

$$\frac{11}{4} \times \frac{77}{X} \quad 11X = 308 \quad (77 \times 4)$$
$$\begin{array}{r} 11 \overline{) 308} \\ \underline{22} \\ 88 \\ \underline{88} \end{array}$$

OR $77 \times 4 = 308$
 $11 \times ? = 308$
 $11 \times 28 = 308$

6. $2/7 \times 3/7 = 6/49$

$$\frac{2}{7} \times \frac{3}{7} = \frac{6}{49}$$

7. What one number can replace both question marks?

$$\frac{2}{?} = \frac{?}{10}$$

$$? = 50$$

Try the answers by inserting them in the place of the ? marks

$$10 \times 10 = 100$$

$$2 \times 50 = 100$$

8. **3.5% of 80 = 2.8**

$$\begin{array}{r} .035 \\ \times 80 \\ \hline 000 \\ \underline{280} \\ 2.80 \end{array}$$

Note: When you see the word “of” in a math problem, it means multiply. In addition, note how 3.5% is changed to .035 in order to calculate the problem.

9. $6 + (4^2) + 12 =$

$$6 + 16 (4 \times 4) + 12 = 34$$

10. $1 \div 1/2 =$

$$\frac{1}{1} \times \frac{2}{1} = 2$$

When you see a problem set up like this, change to multiplication and invert

11. **15 = 75% of ?**

1) $\frac{15}{X} = \frac{75}{100}$

2) $75X = 1500 (15 \times 100)$

3) $1500 \div 75 = 20$
 $X = 20$

OR $15 \times 100 = 1500$
 $75 \times ? = 1500$
 $75 \times 20 = 1500$

12. **$7^2 +$ the square root of 81 =**

$$(7 \times 7) + \sqrt{81} =$$

$$49 + 9 = 58$$

13. ? = 33 1/3% of 963

$$\frac{1}{3} \times \frac{963}{1} = 321 \text{ or } \begin{array}{r} 963 \\ \times .333 \\ \hline 321 \end{array}$$

Remember that the word “of” signifies multiplication

14. Which is half of 1/5?

$$\begin{array}{l} 1/2 \text{ of } 1/5 \\ 1/2 \times 1/5 = 1/10 \end{array}$$