

6th grade
Order of Operations #2

Name: Key

Date: _____ Per: _____

Evaluate the following expressions. Show all of the necessary steps that we went over in class and circle your answer.

1. $16 + 14 \div 2 - 7$

$$16 + 7 - 7$$

$$23 - 7$$

$$\boxed{16}$$

2. $64 \div 2^3 + 4$

$$64 \div 8 + 4$$

$$8 + 4$$

$$\boxed{12}$$

3. $(9 - 4)^2 - 12 \times 2$

$$5^2 - 12 \times 2$$

$$25 - 24$$

$$\boxed{1}$$

4. $[1 + (2 + 5)^2] \times 2$

$$[1 + (7)^2] \times 2$$

$$[1 + 49] \times 2$$

$$50 \times 2$$

$$\boxed{100}$$

5. $3.5 + 2(3.84 - 1.5)$

$$3.5 + 2(2.34)$$

$$3.5 + 4.68$$

$$\boxed{8.18}$$

6. $5\frac{2}{3} - 1\frac{1}{2} + \frac{5}{6}$

$$5\frac{4}{6} - 1\frac{3}{6} + \frac{5}{6}$$

$$4\frac{1}{6} + \frac{5}{6}$$

$$\boxed{5}$$

$$\begin{aligned}
 7. \quad & 4\frac{5}{6} - 2\left(1\frac{2}{3}\right) \\
 & 4\frac{5}{6} - \frac{2}{1} \cdot \frac{5}{3} \\
 & 4\frac{5}{6} - \frac{10}{3} \\
 & 4\frac{5}{6} - 3\frac{2}{6} \\
 & \boxed{1\frac{1}{2}}
 \end{aligned}$$

$$\begin{aligned}
 8. \quad & \frac{1}{3}\left(4\frac{3}{5}\right) + 8\frac{1}{3} \div 5 \\
 & \frac{1}{3} \cdot \frac{23}{5} + \frac{25}{3} \cdot \frac{1}{5} \\
 & \frac{23}{15} + \frac{25}{15} \\
 & \frac{48}{15} \\
 & 3\frac{3}{15} \\
 & \boxed{3\frac{1}{5}}
 \end{aligned}$$

$$\begin{aligned}
 9. \quad & \frac{3(8.1) + 6.8}{(1.5)^2 - 0.25} \\
 & \frac{24.3 + 6.8}{2.25 - .25} \\
 & \frac{31.1}{2} \\
 & \boxed{15.55}
 \end{aligned}$$

$$\begin{aligned}
 10. \quad & 5 - 3 \times \frac{2}{5} + 1\frac{1}{2} \\
 & 5 - \frac{3 \cdot 2}{5} + 1\frac{1}{2} \\
 & 5 - \frac{6}{5} + 1\frac{1}{2} \\
 & \frac{50}{10} - \frac{12}{10} + 1\frac{5}{10} \\
 & \frac{38}{10} + 1\frac{5}{10} \\
 & 1\frac{43}{10} \\
 & \boxed{5\frac{3}{10}}
 \end{aligned}$$

$$\begin{aligned}
 11. \quad & 6.75 - 2(8 - 5.25) \\
 & 6.75 - 2(2.75) \\
 & 6.75 - 5.5 \\
 & \boxed{1.25}
 \end{aligned}$$

$$\begin{aligned}
 12. \quad & 4\frac{2}{5} \div \frac{3}{5} - 5\frac{3}{4} \\
 & \frac{22}{5} \cdot \frac{5}{3} - 5\frac{3}{4} \\
 & \frac{22}{3} - \frac{23}{4} \\
 & \frac{88}{12} - \frac{69}{12} \\
 & \frac{19}{12} \\
 & \boxed{1\frac{7}{12}}
 \end{aligned}$$