

6th grade
Order of Operations #1

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. $15 \cdot 3 + 12 \cdot 2$

$$45 + 24$$

$$\boxed{69}$$

2. $3 \cdot 5 - 45 \div 3^2$

$$15 - \underline{45 \div 9}$$

$$15 - 5$$

$$\boxed{10}$$

3. $(16 \div 4) + 4(2^2 - 2)$

$$4 + 4(4 - 2)$$

$$4 + 4(2)$$

$$4 + 8$$

$$\boxed{12}$$

4. $100 - 9^2 + 2$

$$100 - 81 + 2$$

$$19 + 2$$

$$\boxed{21}$$

5. $100 \div 5 \cdot 2^2$

$$\underline{100 \div 5} \cdot 4$$

$$20 \cdot 4$$

$$\boxed{80}$$

6. $15 - 3 \cdot 4 \div 2 + 5$

$$15 - 12 \div 2 + 5$$

$$15 - 6 + 5$$

$$9 + 5$$

$$\boxed{14}$$

7. $75 + 12 \cdot 2$

$$75 + 24$$

$$\boxed{99}$$

8. $8(7 - 6) \div 2^3$

$$8(1) \div 8$$

$$8 \div 8$$

$$\boxed{1}$$

9. $(9 + 8) + 10(3 + 2)$

$$\begin{aligned} & 9 + 8 \\ & 17 + 20 \\ & \boxed{37} \end{aligned}$$

10. $100 - 25 \div 5$

$$\begin{aligned} & 100 - 5 \\ & \boxed{95} \end{aligned}$$

Evaluate the following expressions. Show your substitution and ALL steps.

$x=2$, $y=5$, $a=3$, and $c=10$

11. $3x^2 + c$

$$\begin{aligned} & 3 \cdot 2^2 + 10 \\ & 3 \cdot 4 + 10 \\ & 12 + 10 \\ & \boxed{22} \end{aligned}$$

12. $4a - c \div 2$

$$\begin{aligned} & 4 \cdot 3 - 10 \div 2 \\ & 12 - 5 \\ & \boxed{7} \end{aligned}$$

13. $\frac{2x+y}{a}$

$$\begin{aligned} & \frac{2(2)+5}{3} \\ & \frac{4+5}{3} \\ & \frac{9}{3} \quad \boxed{3} \end{aligned}$$

14. $\frac{1}{2}c + (x + y)$

$$\begin{aligned} & \frac{1}{2}(10) + (2 + 5) \\ & 5 + 7 \\ & \boxed{12} \end{aligned}$$

15. $3.2x + a^3$

$$\begin{aligned} & 3.2(2) + 3^3 \\ & 6.4 + 27 \\ & \boxed{33.4} \end{aligned}$$

16. $\frac{c^2 - 5y + a}{x}$

$$\begin{aligned} & \frac{10^2 - 5(5) + 3}{2} \\ & \frac{100 - 25 + 3}{2} \\ & \frac{75 + 3}{2} \\ & \frac{78}{2} \quad \boxed{39} \end{aligned}$$

Skills Review

Show all work and circle your answer.

$$1. \quad 3\frac{3}{4} + 2\frac{5}{6}$$

$$3\frac{9}{12} + 2\frac{10}{12}$$

$$5\frac{19}{12}$$

$$\boxed{6\frac{7}{12}}$$
 ✓

$$2. \quad 5\frac{1}{2} - 1\frac{2}{3}$$

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

$$\boxed{3\frac{5}{6}}$$
 ✓

$$3. \quad 78.3 + 2.58$$

$$\begin{array}{r} 78.30 \\ + 2.58 \\ \hline \end{array}$$

$$\boxed{80.88}$$
 ✓

$$4. \quad 48 - 0.39$$

$$\begin{array}{r} 48.00 \\ - .39 \\ \hline \end{array}$$

$$\boxed{47.61}$$
 ✓

$$5. \quad 2\frac{1}{3} \times 4\frac{1}{5}$$

$$\frac{7}{3} \cdot \frac{21}{5}$$

$$\frac{49}{5}$$

$$\boxed{9\frac{4}{5}}$$
 ✓

$$6. \quad 4 \div \frac{2}{5}$$

$$\frac{24.5}{1.21}$$

$$\boxed{10}$$
 ✓

$$7. \quad 1.25 \times 4.5$$

$$\begin{array}{r} 1.25 \\ \times 4.5 \\ \hline 625 \\ +5000 \\ \hline 5.625 \end{array}$$

$$\boxed{5.625}$$
 ✓

$$8. \quad 2.25 \div 1.8$$

$$\begin{array}{r} 1.25 \\ 1.8 \overline{) 2.25} \\ \underline{1.8} \\ 45 \\ \underline{36} \\ 90 \end{array}$$

$$\boxed{1.25}$$
 ✓

$$9. \quad 12\frac{2}{7} - 5\frac{7}{9}$$

$$12\frac{18}{63} - 5\frac{49}{63}$$

$$\boxed{6\frac{32}{63}}$$
 ✓

$$10. \quad 6\frac{3}{10} \div 2\frac{2}{5}$$

$$\frac{63}{10} \div \frac{12}{5}$$

$$\frac{63}{10} \cdot \frac{5}{12}$$

$$\frac{21}{4} = 5\frac{1}{4}$$

$$\boxed{2\frac{5}{8}}$$
 ✓

6th Grade Fast Math
Order of Operations
Warm-up Quiz #1

Name: Key
Date: _____ Per: _____

Simplify each expression. Show all steps and circle your final answer.

1. $8 - 14 \div (9 - 2)$
 $8 - 14 \div 7$
 $8 - 2$
 $\boxed{6}$

2. $54 - 6 \cdot 3 + 4^2$
 $54 - 18 + 16$
 $36 + 16$
 $\boxed{52}$

3. $4 - 24 \div 2^3$
 $4 - 24 \div 8$
 $4 - 3$
 $\boxed{1}$

4. $4(3+2)^2 - 9$
 $4(5)^2 - 9$
 $4(25) - 9$
 $100 - 9$
 $\boxed{91}$

6th Grade Honors Math
Order of Operations
Warm-up Quiz #2

Name: Key
Date: _____ Per: _____

Simplify each expression. Show all steps and circle your final answer.

1. $25 + 5 - (6^2 - 7)$
 $25 + 5 - (36 - 7)$
 $25 + 5 - (29)$
 $30 - 29$
 $\boxed{1}$

2. $(5 - 3)^2 \div (3^2 - 7)$
 $(2)^2 \div (9 - 7)$
 $4 \div 2$
 $\boxed{2}$

3. $2 + 3(8.75 - 6.5)$
 $2 + 3(2.25)$
 $2 + 6.75$
 $\boxed{8.75}$

4. $2\frac{1}{2} + \frac{3}{5} \times 4\frac{1}{6}$
 $2\frac{1}{2} + \frac{3}{5} \cdot \frac{24}{6}$
 $2\frac{1}{2} + 2\frac{1}{2}$
 $\boxed{5}$