

6th FM + Honors  
7th Grade Common Core Math  
Order of Operations #3

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.  $150 - (18 + 6) \cdot 5$

$$150 - 24 \cdot 5$$

$$150 - 120$$

$$\boxed{30}$$

2.  $12 \cdot 3^2 - 5$

$$12 \cdot 9 - 5$$

$$\frac{108 - 5}{\boxed{103}}$$

3.  $(4.8 \div 4)5 + 11.2$

$$\frac{(1.2)5 + 11.2}{6 + 11.2}$$

$$6 + 11.2$$

$$\boxed{17.2}$$

4.  $\frac{4.12 - 3(0.8)}{2.16 - (0.4)^2}$

$$\frac{4.12 - 2.4}{2.16 - .16}$$

$$2.16 - .16$$

$$\frac{1.72}{2}$$

$$2$$

$$\boxed{.86}$$

5.  $\frac{2}{3} \left( 5\frac{1}{4} \right) - \left( 1\frac{1}{2} \right)^2$

$$\frac{2}{3} \cdot \frac{21}{4} - \frac{3}{2} \cdot \frac{3}{2}$$

$$\frac{7}{2} - \frac{9}{4}$$

$$\frac{14}{4} - \frac{9}{4}$$

$$\frac{5}{4} \quad \boxed{1\frac{1}{4}}$$

Evaluate each expression for the given values. Show all steps and circle your answer.

6.  $(1+x)^2 + 14 \div x + 5$  for  $x=2$

$$(1+2)^2 + 14 \div 2 + 5$$

$$3^2 + 7 + 5$$

$$9 + 7 + 5$$

$$16 + 5$$

$$\boxed{21}$$

7.  $3y^3 - 2y$  for  $y=3$

$$3 \cdot 3^3 - 2 \cdot 3$$

$$3 \cdot 27 - 6$$

$$81 - 6$$

$$\boxed{75}$$

8.  $\frac{b}{12} + 3a$  for  $a = \frac{1}{2}$ ,  $b=8$

$$\frac{8}{12} + 3 \cdot \frac{1}{2}$$

$$\frac{2}{3} + \frac{3}{2}$$

$$\frac{4}{6} + \frac{9}{6}$$

$$\frac{13}{6} \quad \boxed{2\frac{1}{6}}$$

9.  $7m - 3n^2$  for  $m=2.8$ ,  $n=1.5$

$$7(2.8) - 3(1.5)^2$$

$$19.6 - 3(2.25)$$

$$19.6 - 6.75$$

$$\boxed{12.85}$$

10.  $xy + y^2$  for  $x = 4\frac{1}{2}$ ,  $y = \frac{2}{3}$

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

$$\frac{9}{2} \cdot \frac{2}{3} + \frac{4}{9}$$

$$3 + \frac{4}{9}$$

$$\boxed{3\frac{4}{9}}$$