Pump

Order of Operations (Day 1)

Name: _____

Date: _____

Apply the Order of Operations to simplify each expression.

Practice

1. $4 + 3(2)$

2. $5 - \frac{8}{2}$

3. $2 + 4 \cdot 8$

4. $6 + \frac{10}{5}$

5. $6 - 3(2)$

6. $2 + 12 \div 3$

CRITICAL THINKING

Jenna has $20. She buys 6 granola bars that cost $2.50 each. Write an expression that gives the amount she will receive in change, and give that amount.

Pump

Order of Operations (Day 2)

Name: _____

Date: _____

Apply the Order of Operations to simplify each expression.

Practice

1. $2 + 3(4 + 2)$

2. $8 - 3(4 - 2)$

3. $4 \bullet (5 + 2 \bullet 3)$

4. $2 \bullet (10 - 2 \bullet 2)$

5. $6 \bullet (7 - 2 \bullet 3)$

6. $6 + 5(2 + 3 \bullet 5)$

CRITICAL THINKING

Mandy is treating her four young cousins to lunch at Delicious Delhi. Each kid gets the lunch special for $5.95 and a mango lassi for $3.25. For herself, Mandy order a lunch platter for $6.95. Write an expression that gives the amount Mandy spends (without tax or tip) on the meal, and simplify the expression.

Pump

Order of Operations (Day 3)

Name: _____

Date: _____

Apply the Order of Operations to simplify each expression.

Practice

1. $2 \cdot 5^2$

2. $2 + 3(4^3)$

3. $8 + 2(3 + 4)^2$

4. $60 - 2(3 + 2)^2$

5. $5 + 3(4 \cdot 2)^2$

6. $6 + \frac{(3+5)^2}{8}$

CRITICAL THINKING

Mr. Yukilous has hired some workers to install a patio. The patio will be a square, 8 feet on edge. The workers charge $15 per square foot for the patio tiles, plus $500 for the labor. Write an expression giving the total cost, then simplify it to find that cost.

Pump

Order of Operations (Day 4)

Name: _____

Date: _____

Apply the Order of Operations to simplify each expression.

Practice

1. $\frac{2 \cdot 5^2}{6+4}$

2. $5 + (7 - 3)(3^3)$

3. $6 + \frac{8}{4}(3 + 5)^2$

4. $60 - 2(\frac{12}{4} + 3)^2$

5. $2 + 2(2 + 2 \cdot 2)^2$

6. $2 + \frac{(3+5)^2}{9+7}$

CRITICAL THINKING

Rewrite the expression $a + b(c + d)^2$ to show all the "hidden" implicit symbols, coefficients, and exponents that we usually leave out. Then evaluate it for $a = 2; b = 3; c = 4; d = 5$.

Pump

Order of Operations (Day 5)

Name: _____

Date: _____

Apply the Order of Operations to simplify each expression.

Practice

1. $40 + 2(3 - 4 \cdot (5 + 6))$

2. $6 + 2\left(\frac{6+\frac{6}{2}}{5-2}\right)$

3. $6 + 2(a + 4(3 + 2));\ a = 12$

4. $6 + (1 + (2 + 3)^2)^2$

5. $78 - 3(6 + (2 + 3)^2)$

6. $(4 + 1)^2 - 3\sqrt{20 - 4}$

CRITICAL THINKING

The Distance Formula gives the distance *d* between two points, (x_1, y_1) and (x_2, y_2). It is $d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$. Find the distance between $(2, 4)$ and $(8, 12)$.