Order of Operations with Decimals (I)

Name: _____

Date:

Solve each expression using the correct order of operations.

$$3.5 imes \left((-7.4) - 4.5 + (-4.4)^2
ight)$$
 $0.5 imes \left((-8.1) - 4.4 + (0.4)^2
ight)$

$$6.6 + 3.7 \div (3.3 - 4.3)^3$$
 $(5.4)^2 - 7.8 \times (2.8 + (-8.6))$

$$((-5.2) - (-4.9)) \div 2.5 + (-9.5)^2$$
 $(-2.4) \times (8.1 + (-8.9) - 5.2)^2$

 $(3.8 - (-3.9))^2 \div (4.7 + (-5.8))$ $((-2.5) + 2.9) \times (3.5 - 4.5)^3$

Order of Operations with Decimals (I) Answers

Name:

Date:

Solve each expression using the correct order of operations.

$$3.5 \times \left((-7.4) - 4.5 + (-4.4)^2 \right)$$

= 3.5 × $\left((-7.4) - 4.5 + 19.36 \right)$
= 3.5 × $\left((-11.9) + 19.36 \right)$
= 3.5×7.46
= 26.11

$$6.6 + 3.7 \div (\underline{3.3 - 4.3})^{3}$$

= 6.6 + 3.7 ÷ $(\underline{-1})^{3}$
= 6.6 + $\underline{3.7} \div (\underline{-1})$
= $\underline{6.6 + (\underline{-3.7})}$
= 2.9

$$\left(\frac{(-5.2) - (-4.9)}{(-5.2) - (-4.9)}\right) \div 2.5 + (-9.5)^2$$

= $(-0.3) \div 2.5 + (-9.5)^2$
= $(-0.3) \div 2.5 + 90.25$
= $(-0.12) + 90.25$
= 90.13

$$\left(\frac{3.8 - (-3.9)}{(-3.9)}\right)^2 \div (4.7 + (-5.8))$$
$$= (7.7)^2 \div \left(\frac{4.7 + (-5.8)}{(-1.1)}\right)$$
$$= \frac{(7.7)^2}{59.29} \div (-1.1)$$
$$= -53.9$$

= -

$$0.5 \times \left((-8.1) - 4.4 + \underline{(0.4)^2} \right)$$

= 0.5 × $\left(\underline{(-8.1) - 4.4} + 0.16 \right)$
= 0.5 × $\left(\underline{(-12.5) + 0.16} \right)$
= $\underline{0.5 \times (-12.34)}$
= -6.17

$$(5.4)^{2} - 7.8 \times \left(\underline{2.8 + (-8.6)}\right)$$

= $\underline{(5.4)^{2}} - 7.8 \times (-5.8)$
= $29.16 - \underline{7.8 \times (-5.8)}$
= $\underline{29.16 - (-45.24)}$
= 74.4

$$(-2.4) \times \left(\frac{8.1 + (-8.9)}{-5.2}\right)^2$$

= (-2.4) × $\left(\frac{(-0.8) - 5.2}{-5.2}\right)^2$
= (-2.4) × $\frac{(-6)^2}{-6}$
= $\frac{(-2.4) \times 36}{-86.4}$

$$\left(\frac{(-2.5) + 2.9}{(-2.5) + 2.9}\right) \times (3.5 - 4.5)^3$$
$$= 0.4 \times (3.5 - 4.5)^3$$
$$= 0.4 \times (-1)^3$$
$$= 0.4 \times (-1)$$
$$= -0.4$$