Order of Operations with Decimals (D)

Name:

Date:

Solve each expression using the correct order of operations.

$$((-3.4) \div (-8.5)) \times (-5.5) + (9.5)^2 - (2.4)^2$$

$$(2.4)^2 \div ((-0.2) - 2.2) \times (-8.4) + 5.8 \times (-2.7)$$

$$3.2 + 4.4 - \left(0.2\right)^2 \times \left(2.1 \div \left(-2.1\right)\right)^3$$

Order of Operations with Decimals (D) Answers

Name: _____ Date: ____

Solve each expression using the correct order of operations.

$$\left(\frac{(-3.4) \div (-8.5)}{(-3.4) \div (-8.5)}\right) \times (-5.5) + (9.5)^{2} - (2.4)^{2}$$

$$= 0.4 \times (-5.5) + \frac{(9.5)^{2}}{(-2.4)^{2}} - (2.4)^{2}$$

$$= 0.4 \times (-5.5) + 90.25 - \frac{(2.4)^{2}}{(-2.2) + 90.25} - 5.76$$

$$= \frac{(-2.2) + 90.25}{(-2.2) + 90.25} - 5.76$$

$$= 88.05 - 5.76$$

$$= 82.29$$

$$(2.4)^{2} \div \left((-0.2) - 2.2 \right) \times (-8.4) + 5.8 \times (-2.7)$$

$$= (2.4)^{2} \div (-2.4) \times (-8.4) + 5.8 \times (-2.7)$$

$$= 5.76 \div (-2.4) \times (-8.4) + 5.8 \times (-2.7)$$

$$= (-2.4) \times (-8.4) + 5.8 \times (-2.7)$$

$$= 20.16 + 5.8 \times (-2.7)$$

$$= 20.16 + (-15.66)$$

$$= 4.5$$

$$3.2 + 4.4 - (0.2)^{2} \times \left(2.1 \div (-2.1)\right)^{3}$$

$$= 3.2 + 4.4 - (0.2)^{2} \times (-1)^{3}$$

$$= 3.2 + 4.4 - 0.04 \times (-1)^{3}$$

$$= 3.2 + 4.4 - 0.04 \times (-1)$$

$$= 3.2 + 4.4 - (-0.04)$$

$$= 7.6 - (-0.04)$$

$$= 7.64$$