

Order of Operations with Decimals (B)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$6.8 \div 1.25 \times (5.8 + 2.9 - 7.7)^3$$

$$5.7 \times ((6.2)^2 \div 3.1 - 1.6 + 6.6)$$

$$(2.8 \div 2.8)^3 \times (4.7 - 4.5 + 7.8)$$

$$8.2 \times (2.9 + 3.5 - 9.8 \div (2.8)^2)$$

$$((1.9 + 4.5 - 4.4)^2 \div 2.5) \times 7.6$$

$$4.4 \times ((9.2)^2 \div 4.6 + 7.1 - 8.3)$$

$$((5.4)^2 \div 2.7) \times 7.7 + 1.8 - 8.2$$

$$(2.4 + (5.2)^2 - 8.3 \times 2.6) \div 1.2$$

Order of Operations with Decimals (B) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & 6.8 \div 1.25 \times (\underline{5.8 + 2.9} - 7.7)^3 \\ &= 6.8 \div 1.25 \times (\underline{8.7 - 7.7})^3 \\ &= 6.8 \div 1.25 \times \underline{1^3} \\ &= \underline{6.8 \div 1.25} \times 1 \\ &= \underline{5.44 \times 1} \\ &= 5.44 \end{aligned}$$

$$\begin{aligned} & 5.7 \times (\underline{(6.2)^2} \div 3.1 - 1.6 + 6.6) \\ &= 5.7 \times (\underline{38.44 \div 3.1} - 1.6 + 6.6) \\ &= 5.7 \times (\underline{12.4 - 1.6} + 6.6) \\ &= 5.7 \times (\underline{10.8 + 6.6}) \\ &= \underline{5.7 \times 17.4} \\ &= 99.18 \end{aligned}$$

$$\begin{aligned} & (\underline{2.8 \div 2.8})^3 \times (4.7 - 4.5 + 7.8) \\ &= 1^3 \times (\underline{4.7 - 4.5} + 7.8) \\ &= 1^3 \times (\underline{0.2 + 7.8}) \\ &= \underline{1^3} \times 8 \\ &= \underline{1 \times 8} \\ &= 8 \end{aligned}$$

$$\begin{aligned} & 8.2 \times (2.9 + 3.5 - 9.8 \div \underline{(2.8)^2}) \\ &= 8.2 \times (2.9 + 3.5 - \underline{9.8 \div 7.84}) \\ &= 8.2 \times (\underline{2.9 + 3.5} - 1.25) \\ &= 8.2 \times (\underline{6.4 - 1.25}) \\ &= \underline{8.2 \times 5.15} \\ &= 42.23 \end{aligned}$$

$$\begin{aligned} & ((\underline{1.9 + 4.5} - 4.4)^2 \div 2.5) \times 7.6 \\ &= ((\underline{6.4 - 4.4})^2 \div 2.5) \times 7.6 \\ &= (\underline{2^2} \div 2.5) \times 7.6 \\ &= (\underline{4 \div 2.5}) \times 7.6 \\ &= \underline{1.6 \times 7.6} \\ &= 12.16 \end{aligned}$$

$$\begin{aligned} & 4.4 \times (\underline{(9.2)^2} \div 4.6 + 7.1 - 8.3) \\ &= 4.4 \times (\underline{84.64 \div 4.6} + 7.1 - 8.3) \\ &= 4.4 \times (\underline{18.4 + 7.1} - 8.3) \\ &= 4.4 \times (\underline{25.5 - 8.3}) \\ &= \underline{4.4 \times 17.2} \\ &= 75.68 \end{aligned}$$

$$\begin{aligned} & (\underline{(5.4)^2} \div 2.7) \times 7.7 + 1.8 - 8.2 \\ &= (\underline{29.16 \div 2.7}) \times 7.7 + 1.8 - 8.2 \\ &= \underline{10.8 \times 7.7} + 1.8 - 8.2 \\ &= \underline{83.16 + 1.8} - 8.2 \\ &= \underline{84.96 - 8.2} \\ &= 76.76 \end{aligned}$$

$$\begin{aligned} & (2.4 + \underline{(5.2)^2} - 8.3 \times 2.6) \div 1.2 \\ &= (2.4 + 27.04 - \underline{8.3 \times 2.6}) \div 1.2 \\ &= (\underline{2.4 + 27.04} - 21.58) \div 1.2 \\ &= (\underline{29.44 - 21.58}) \div 1.2 \\ &= \underline{7.86 \div 1.2} \\ &= 6.55 \end{aligned}$$