

Order of Operations with Decimals (D)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(4.5)^2 - 9.6 + 1.4 \times (1.6 \div (2.2 - 1.8))$$

$$((5.3 + 3.3) \times 5.4) \div (1.5)^2 - 1.4 - 4.3$$

$$8.8 - 4.2 \div (5.6 + 4.9) \times 6.3 + (7.7)^2$$

$$(2.4 \div 1.5) \times 9.8 + (5.7)^2 - (2.7)^2$$

$$(2.2 \times (2.1 + 2.6 - 4.7)^3) \div (3.6 \div 2.5)$$

$$(7.2 \div (9.2 + 2.1 - 4.1))^2 \times (6.7)^2$$

Order of Operations with Decimals (D) Answers

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned}(4.5)^2 - 9.6 + 1.4 \times (1.6 \div (\underline{2.2 - 1.8})) \\= (4.5)^2 - 9.6 + 1.4 \times (\underline{1.6 \div 0.4}) \\= \underline{(4.5)^2} - 9.6 + 1.4 \times 4 \\= 20.25 - 9.6 + \underline{1.4 \times 4} \\= \underline{20.25 - 9.6} + 5.6 \\= \underline{10.65 + 5.6} \\= 16.25\end{aligned}$$

$$\begin{aligned}((\underline{5.3 + 3.3}) \times 5.4) \div (1.5)^2 - 1.4 - 4.3 \\= (\underline{8.6 \times 5.4}) \div (1.5)^2 - 1.4 - 4.3 \\= 46.44 \div \underline{(1.5)^2} - 1.4 - 4.3 \\= \underline{46.44 \div 2.25} - 1.4 - 4.3 \\= \underline{20.64 - 1.4} - 4.3 \\= \underline{19.24 - 4.3} \\= 14.94\end{aligned}$$

$$\begin{aligned}8.8 - 4.2 \div (\underline{5.6 + 4.9}) \times 6.3 + (7.7)^2 \\= 8.8 - 4.2 \div 10.5 \times 6.3 + \underline{(7.7)^2} \\= 8.8 - \underline{4.2 \div 10.5} \times 6.3 + 59.29 \\= 8.8 - \underline{0.4 \times 6.3} + 59.29 \\= \underline{8.8 - 2.52} + 59.29 \\= \underline{6.28 + 59.29} \\= 65.57\end{aligned}$$

$$\begin{aligned}(\underline{2.4 \div 1.5}) \times 9.8 + (5.7)^2 - (2.7)^2 \\= 1.6 \times 9.8 + \underline{(5.7)^2} - (2.7)^2 \\= 1.6 \times 9.8 + 32.49 - \underline{(2.7)^2} \\= \underline{1.6 \times 9.8} + 32.49 - 7.29 \\= \underline{15.68 + 32.49} - 7.29 \\= \underline{48.17 - 7.29} \\= 40.88\end{aligned}$$

$$\begin{aligned}\left(2.2 \times (\underline{2.1 + 2.6} - 4.7)^3\right) \div (3.6 \div 2.5) \\= \left(2.2 \times (\underline{4.7 - 4.7})^3\right) \div (3.6 \div 2.5) \\= (2.2 \times \underline{0^3}) \div (3.6 \div 2.5) \\= (\underline{2.2 \times 0}) \div (3.6 \div 2.5) \\= 0 \div (\underline{3.6 \div 2.5}) \\= \underline{0 \div 1.44} \\= 0\end{aligned}$$

$$\begin{aligned}\left(7.2 \div (\underline{9.2 + 2.1} - 4.1)\right)^2 \times (6.7)^2 \\= \left(7.2 \div (\underline{11.3 - 4.1})\right)^2 \times (6.7)^2 \\= (\underline{7.2 \div 7.2})^2 \times (6.7)^2 \\= \underline{1^2} \times (6.7)^2 \\= 1 \times \underline{(6.7)^2} \\= \underline{1 \times 44.89} \\= 44.89\end{aligned}$$