

Order of Operations (H)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$(8 - 5 + 7) \div (10 \times (4 - 3)^3)$$

$$(8 \div (3 + 5 - 4)) \times (7 - 2^2)$$

$$(6^2 \div (7 - 4)^2) \times 9 + 2$$

$$8 \times (3 + 9) \div 2^2 - 10 + 6$$

$$5^2 \times ((3 + 6 - 9) \div 2)^3$$

$$9 + 3^3 - 2 \times (6 \div (10 \div 5))$$

Order of Operations (H)

Name: _____

Date: _____

Simplify each expression using the correct order of operations.

$$\begin{aligned} & (\underline{8 - 5} + 7) \div (10 \times (4 - 3)^3) \\ &= (\underline{3 + 7}) \div (10 \times (4 - 3)^3) \\ &= 10 \div (10 \times (\underline{4 - 3})^3) \\ &= 10 \div (10 \times \underline{1^3}) \\ &= 10 \div (\underline{10 \times 1}) \\ &= \underline{10 \div 10} \\ &= 1 \end{aligned}$$

$$\begin{aligned} & (8 \div (\underline{3 + 5} - 4)) \times (7 - 2^2) \\ &= (8 \div (\underline{8 - 4})) \times (7 - 2^2) \\ &= (\underline{8 \div 4}) \times (7 - 2^2) \\ &= 2 \times (7 - \underline{2^2}) \\ &= 2 \times (\underline{7 - 4}) \\ &= \underline{2 \times 3} \\ &= 6 \end{aligned}$$

$$\begin{aligned} & (6^2 \div (\underline{7 - 4})^2) \times 9 + 2 \\ &= (\underline{6^2} \div 3^2) \times 9 + 2 \\ &= (36 \div \underline{3^2}) \times 9 + 2 \\ &= (\underline{36 \div 9}) \times 9 + 2 \\ &= \underline{4 \times 9} + 2 \\ &= \underline{36 + 2} \\ &= 38 \end{aligned}$$

$$\begin{aligned} & 8 \times (\underline{3 + 9}) \div 2^2 - 10 + 6 \\ &= 8 \times 12 \div \underline{2^2} - 10 + 6 \\ &= \underline{8 \times 12} \div 4 - 10 + 6 \\ &= \underline{96 \div 4} - 10 + 6 \\ &= \underline{24 - 10} + 6 \\ &= \underline{14 + 6} \\ &= 20 \end{aligned}$$

$$\begin{aligned} & 5^2 \times ((\underline{3 + 6} - 9) \div 2)^3 \\ &= 5^2 \times ((\underline{9 - 9}) \div 2)^3 \\ &= 5^2 \times (\underline{0 \div 2})^3 \\ &= \underline{5^2} \times 0^3 \\ &= 25 \times \underline{0^3} \\ &= \underline{25 \times 0} \\ &= 0 \end{aligned}$$

$$\begin{aligned} & 9 + 3^3 - 2 \times (6 \div (\underline{10 \div 5})) \\ &= 9 + 3^3 - 2 \times (\underline{6 \div 2}) \\ &= 9 + \underline{3^3} - 2 \times 3 \\ &= 9 + 27 - \underline{2 \times 3} \\ &= \underline{9 + 27} - 6 \\ &= \underline{36 - 6} \\ &= 30 \end{aligned}$$