Order of Operations with Decimals (F)

Name: _____ Date: _____

Solve each expression using the correct order of operations.

$(1.7 + 2.3)^3 \div (9.8 - 1.8) \times (1.4 + 3.5)$

$(1.7 + 2.4) \times 7.5 \div 2.5 - (3.2)^2 + 1.25$

$(9.6)^2 \times ((2.6 - 1.6 + 5.1) \div 6.1)^2$

$\left((1.5)^2 \div 4.5\right) \times (2.2)^2 + 2.6 - 1.4$

$\left(3.9 \div (6.9 - 5.9)^3\right) \times (9.2 + 2.7 + 5.6)$

$9.1 \times ((8.5 - 6.8 + 2.1) \div (6.9 - 3.1))^3$

Order of Operations with Decimals (F) Answers

Name: _____ Date: _____

Solve each expression using the correct order of operations.

$(1.7 + 2.3)^3 \div (9.8 - 1.8) \times (1.4 + 3.5)$
$= 4^3 \div (9.8 - 1.8) \times (1.4 + 3.5)$
$= 4^3 \div 8 \times (1.4 + 3.5)$
$= 4^3 \div 8 \times 4.9$
$= 64 \div 8 \times 4.9$
$= 8 \times 4.9$
$= 39.2$

$(1.7 + 2.4) \times 7.5 \div 2.5 - (3.2)^2 + 1.25$
$= 4.1 \times 7.5 \div 2.5 - (3.2)^2 + 1.25$
$= 4.1 \times 7.5 \div 2.5 - 10.24 + 1.25$
$= 30.75 \div 2.5 - 10.24 + 1.25$
$= 12.3 - 10.24 + 1.25$
$= 2.06 + 1.25$
$= 3.31$

$(9.6)^2 \times ((2.6 - 1.6 + 5.1) \div 6.1)^2$
$= (9.6)^2 \times ((1 + 5.1) \div 6.1)^2$
$= (9.6)^2 \times (6.1 \div 6.1)^2$
$= (9.6)^2 \times 1^2$
$= 92.16 \times 1^2$
$= 92.16 \times 1$
$= 92.16$

$\left((1.5)^2 \div 4.5\right) \times (2.2)^2 + 2.6 - 1.4$
$= (2.25 \div 4.5) \times (2.2)^2 + 2.6 - 1.4$
$= 0.5 \times (2.2)^2 + 2.6 - 1.4$
$= 0.5 \times 4.84 + 2.6 - 1.4$
$= 2.42 + 2.6 - 1.4$
$= 5.02 - 1.4$
$= 3.62$

$\left(3.9 \div (6.9 - 5.9)^3\right) \times (9.2 + 2.7 + 5.6)$
$= \left(3.9 \div 1^3\right) \times (9.2 + 2.7 + 5.6)$
$= (3.9 \div 1) \times (9.2 + 2.7 + 5.6)$
$= 3.9 \times (9.2 + 2.7 + 5.6)$
$= 3.9 \times (11.9 + 5.6)$
$= 3.9 \times 17.5$
$= 68.25$

$9.1 \times ((8.5 - 6.8 + 2.1) \div (6.9 - 3.1))^3$
$= 9.1 \times ((1.7 + 2.1) \div (6.9 - 3.1))^3$
$= 9.1 \times (3.8 \div (6.9 - 3.1))^3$
$= 9.1 \times (3.8 \div 3.8)^3$
$= 9.1 \times 1^3$
$= 9.1 \times 1$
$= 9.1$