Order of Operations with Decimals (E)

Name: _____ Date: _____

Simplify each expression using the correct order of operations.

$5.6 \times \left((3.5)^2 - 9.1 + 6.4\right)$

$1.25 - 2.1 \times \left((1.6)^2 \div 6.4\right)$

$5.5 \times \left(7.8 + 4.8 - (2.6)^2\right)$

$(2.8 - 2.8) \times 3.75 + (4.5)^2$

$(6.5)^2 \times (2.5 + 7.1 - 7.8)$

$(7.2)^2 - 4.9 \times (5.1 + 3.1)$

$\left((2.7)^2 \div 8.1\right) \times 3.2 + 8.7$

$(3.9)^2 \div (6.5 - 5.2) \times 4.8$

Order of Operations with Decimals (E) Answers

Name: _____ Date: _____

Simplify each expression using the correct order of operations.

$5.6 \times \left((3.5)^2 - 9.1 + 6.4 \right)$
$= 5.6 \times (12.25 - 9.1 + 6.4)$
$= 5.6 \times (3.15 + 6.4)$
$= 5.6 \times 9.55$
$= 53.48$

$1.25 - 2.1 \times \left((1.6)^2 \div 6.4 \right)$
$= 1.25 - 2.1 \times (2.56 \div 6.4)$
$= 1.25 - 2.1 \times 0.4$
$= 1.25 - 0.84$
$= 0.41$

$5.5 \times \left(7.8 + 4.8 - (2.6)^2 \right)$
$= 5.5 \times (7.8 + 4.8 - 6.76)$
$= 5.5 \times (12.6 - 6.76)$
$= 5.5 \times 5.84$
$= 32.12$

$(2.8 - 2.8) \times 3.75 + (4.5)^2$
$= 0 \times 3.75 + (4.5)^2$
$= 0 \times 3.75 + 20.25$
$= 0 + 20.25$
$= 20.25$

$(6.5)^2 \times (2.5 + 7.1 - 7.8)$
$= (6.5)^2 \times (9.6 - 7.8)$
$= (6.5)^2 \times 1.8$
$= 42.25 \times 1.8$
$= 76.05$

$(7.2)^2 - 4.9 \times (5.1 + 3.1)$
$= (7.2)^2 - 4.9 \times 8.2$
$= 51.84 - 4.9 \times 8.2$
$= 51.84 - 40.18$
$= 11.66$

$\left((2.7)^2 \div 8.1 \right) \times 3.2 + 8.7$
$= (7.29 \div 8.1) \times 3.2 + 8.7$
$= 0.9 \times 3.2 + 8.7$
$= 2.88 + 8.7$
$= 11.58$

$(3.9)^2 \div (6.5 - 5.2) \times 4.8$
$= (3.9)^2 \div 1.3 \times 4.8$
$= 15.21 \div 1.3 \times 4.8$
$= 11.7 \times 4.8$
$= 56.16$