Order of Operations with Decimals (C)

Name: _____ Date: _____

Simplify each expression using the correct order of operations.

$(6{,}9 - (-8{,}1)) \times ((-6{,}9) + 5{,}6)^2$

$(7{,}9 - (-8{,}9) + (-2{,}2)) \times (-1{,}5)^2$

$(-2{,}2) - (9{,}2)^2 \div ((-6{,}4) \times 2{,}5)$

$((-6{,}4) - (-8{,}2)) \times (-5{,}1) + (0{,}3)^2$

$\left((2{,}5)^2 - 9{,}8\right) \times (6{,}9 + 1{,}5)$

$9{,}6 \times ((-9{,}6) - (-1{,}8) + 7{,}3)^2$

$(-8{,}3)^2 - 4{,}4 \times ((-1{,}7) + 0{,}2)$

$(-2{,}9)^2 + 6{,}8 \times ((-8{,}6) - 2{,}1)$

Order of Operations with Decimals (C) Answers

Name: _____ Date: _____

Simplify each expression using the correct order of operations.

$\left(6{,}9 - (-8{,}1)\right) \times ((-6{,}9) + 5{,}6)^2$

$= 15 \times \left((-6{,}9) + 5{,}6\right)^2$

$= 15 \times (-1{,}3)^2$

$= 15 \times 1{,}69$

$= 25{,}35$

$\left(7{,}9 - (-8{,}9) + (-2{,}2)\right) \times (-1{,}5)^2$

$= \left(16{,}8 + (-2{,}2)\right) \times (-1{,}5)^2$

$= 14{,}6 \times (-1{,}5)^2$

$= 14{,}6 \times 2{,}25$

$= 32{,}85$

$(-2{,}2) - (9{,}2)^2 \div \left((-6{,}4) \times 2{,}5\right)$

$= (-2{,}2) - (9{,}2)^2 \div (-16)$

$= (-2{,}2) - 84{,}64 \div (-16)$

$= (-2{,}2) - (-5{,}29)$

$= 3{,}09$

$\left((-6{,}4) - (-8{,}2)\right) \times (-5{,}1) + (0{,}3)^2$

$= 1{,}8 \times (-5{,}1) + (0{,}3)^2$

$= 1{,}8 \times (-5{,}1) + 0{,}09$

$= (-9{,}18) + 0{,}09$

$= -9{,}09$

$\left((2{,}5)^2 - 9{,}8\right) \times (6{,}9 + 1{,}5)$

$= \left(6{,}25 - 9{,}8\right) \times (6{,}9 + 1{,}5)$

$= (-3{,}55) \times \left(6{,}9 + 1{,}5\right)$

$= (-3{,}55) \times 8{,}4$

$= -29{,}82$

$9{,}6 \times \left((-9{,}6) - (-1{,}8) + 7{,}3\right)^2$

$= 9{,}6 \times \left((-7{,}8) + 7{,}3\right)^2$

$= 9{,}6 \times (-0{,}5)^2$

$= 9{,}6 \times 0{,}25$

$= 2{,}4$

$(-8{,}3)^2 - 4{,}4 \times \left((-1{,}7) + 0{,}2\right)$

$= (-8{,}3)^2 - 4{,}4 \times (-1{,}5)$

$= 68{,}89 - 4{,}4 \times (-1{,}5)$

$= 68{,}89 - (-6{,}6)$

$= 75{,}49$

$(-2{,}9)^2 + 6{,}8 \times \left((-8{,}6) - 2{,}1\right)$

$= (-2{,}9)^2 + 6{,}8 \times (-10{,}7)$

$= 8{,}41 + 6{,}8 \times (-10{,}7)$

$= 8{,}41 + (-72{,}76)$

$= -64{,}35$