Order of Operations with Decimals (D)

Name: _____ Date: _____

Simplify each expression using the correct order of operations.

$((-3{,}4) \div (-8{,}5)) \times (-5{,}5) + (9{,}5)^2 - (2{,}4)^2$

$(2{,}4)^2 \div ((-0{,}2) - 2{,}2) \times (-8{,}4) + 5{,}8 \times (-2{,}7)$

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

Order of Operations with Decimals (D) Answers

Name: _____ Date: _____

Simplify each expression using the correct order of operations.

$\left((-3{,}4) \div (-8{,}5)\right) \times (-5{,}5) + (9{,}5)^2 - (2{,}4)^2$

$= 0{,}4 \times (-5{,}5) + (9{,}5)^2 - (2{,}4)^2$

$= 0{,}4 \times (-5{,}5) + 90{,}25 - (2{,}4)^2$

$= 0{,}4 \times (-5{,}5) + 90{,}25 - 5{,}76$

$= (-2{,}2) + 90{,}25 - 5{,}76$

$= 88{,}05 - 5{,}76$

$= 82{,}29$

$(2{,}4)^2 \div \left((-0{,}2) - 2{,}2\right) \times (-8{,}4) + 5{,}8 \times (-2{,}7)$

$= (2{,}4)^2 \div (-2{,}4) \times (-8{,}4) + 5{,}8 \times (-2{,}7)$

$= 5{,}76 \div (-2{,}4) \times (-8{,}4) + 5{,}8 \times (-2{,}7)$

$= (-2{,}4) \times (-8{,}4) + 5{,}8 \times (-2{,}7)$

$= 20{,}16 + 5{,}8 \times (-2{,}7)$

$= 20{,}16 + (-15{,}66)$

$= 4{,}5$

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

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

$= 3{,}2 + 4{,}4 - 0{,}04 \times (-1)^3$

$= 3{,}2 + 4{,}4 - 0{,}04 \times (-1)$

$= 3{,}2 + 4{,}4 - (-0{,}04)$

$= 7{,}6 - (-0{,}04)$

$= 7{,}64$