Order of Operations with Decimals (C)

Name:

Date:

Solve each expression using the correct order of operations.

 $(8.7 \div 2.9)^2 \times 2.5 - 7.3 + 7.7 - 5.7$ $(3.1)^2 + 4.7 \times 1.9 \div (9.3 - 4.6) \times 6.9$

$$(5.6)^2 \times ((6.4 + 6.6 - 2.8) \div 6.8)^2$$
 $(6.6 + (5.3)^2 - (1.9)^2) \div (1.4 \times 0.6)$

$$(7.8 \div 0.75) \times 0.8 - (1.3)^2 + (6.4)^2$$
 $(4.5)^2 \div (5.8 - 4.3) \times 3.8 + (0.2)^2$

Order of Operations with Decimals (C) Answers

Name: _____

Date:

Solve each expression using the correct order of operations.

$$(\frac{8.7 \div 2.9}{2})^2 \times 2.5 - 7.3 + 7.7 - 5.7$$

= $\frac{3^2}{2} \times 2.5 - 7.3 + 7.7 - 5.7$
= $\frac{9 \times 2.5}{2.5} - 7.3 + 7.7 - 5.7$
= $\frac{22.5 - 7.3}{2.5} + 7.7 - 5.7$
= $\frac{15.2 + 7.7}{2.5} - 5.7$
= $\frac{22.9 - 5.7}{2.5}$
= 17.2

$$(3.1)^{2} + 4.7 \times 1.9 \div (9.3 - 4.6) \times 6.9$$

= $(3.1)^{2} + 4.7 \times 1.9 \div 4.7 \times 6.9$
= $9.61 + 4.7 \times 1.9 \div 4.7 \times 6.9$
= $9.61 + 8.93 \div 4.7 \times 6.9$
= $9.61 + 1.9 \times 6.9$
= $9.61 + 13.11$
= 22.72

$$(5.6)^{2} \times ((\underline{6.4 + 6.6} - 2.8) \div 6.8)^{2}$$

= $(5.6)^{2} \times ((\underline{13 - 2.8}) \div 6.8)^{2}$
= $(5.6)^{2} \times (\underline{10.2 \div 6.8})^{2}$
= $\underline{(5.6)^{2}} \times (1.5)^{2}$
= $31.36 \times (\underline{1.5})^{2}$
= 31.36×2.25
= 70.56

$$\begin{pmatrix} 6.6 + (5.3)^2 - (1.9)^2 \end{pmatrix} \div (1.4 \times 0.6) \\ = \left(6.6 + 28.09 - (1.9)^2 \right) \div (1.4 \times 0.6) \\ = (6.6 + 28.09 - 3.61) \div (1.4 \times 0.6) \\ = (34.69 - 3.61) \div (1.4 \times 0.6) \\ = 31.08 \div (1.4 \times 0.6) \\ = 31.08 \div 0.84 \\ = 37$$

$$(7.8 \div 0.75) \times 0.8 - (1.3)^{2} + (6.4)^{2}$$

= 10.4 × 0.8 - (1.3)² + (6.4)²
= 10.4 × 0.8 - 1.69 + (6.4)²
= 10.4 × 0.8 - 1.69 + 40.96
= 8.32 - 1.69 + 40.96
= 6.63 + 40.96
= 47.59

$$(4.5)^{2} \div (\underline{5.8 - 4.3}) \times 3.8 + (0.2)^{2}$$

= $(\underline{4.5})^{2} \div 1.5 \times 3.8 + (0.2)^{2}$
= $20.25 \div 1.5 \times 3.8 + (\underline{0.2})^{2}$
= $\underline{20.25 \div 1.5} \times 3.8 + 0.04$
= $\underline{13.5 \times 3.8} + 0.04$
= $\underline{51.3 + 0.04}$
= 51.34