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*I can **multiply** and **divide decimals**.*

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**Multiplying Signed Decimals**

Multiply the numbers, ignoring the decimals at first.

Use integer rules to determine sign of product.

Count up the number of digits behind the decimals in the original problem. This will be the number of digits behind the decimal in the answer.

1. $3.2 \cdot (-4.3)$

$$\begin{array}{r} 32 \\ \times 43 \\ \hline \end{array}$$ -13.76

2. $(-4.32)(-2.7)$

$$\begin{array}{r} 432 \\ \times\ 27 \\ \hline \end{array}$$ 11.664

3. $0.12 \cdot (-3.1)$

$$\begin{array}{r} 12 \\ \times 31 \\ \hline \end{array}$$ -0.372

4. $(-0.2)(-1.4)$

$$\begin{array}{r} 14 \\ \times\ 2 \\ \hline \end{array}$$ 0.28

**Multiple Numbers**

1) $2.1 \cdot (-4.9)(3)$

-30.87

2) $-1.6(2.5)(-1.8)$

7.2

3) $-2(4.5)(12.8)$

-115.2

**Dividing Signed Decimals**

Move decimal point in divisor to the right to make it a whole number.

Move the decimal point in the dividend the same amount to the right; then place on top.

Divide as normal, using integer rules to determine sign of quotient.

1. $25.2 \div (-0.2)$

$-2\overline{)252.}$

$-126$

2. $-7.29 \div (-9)$

$-9\overline{)-7.29}$

$-0.81$

3. $-1.15 \div 0.5$

$5\overline{)-11.5}$

$-2.3$

4. $4.20 \div (-0.07)$

$-7\overline{)420.}$

$-60$

**Multiplying and Dividing Decimals Word Problems:**

1) Benjamin bought 12 goldfish. Each goldfish cost $0.98. How much did Benjamin spend?

$12 \cdot 0.98 =$ $11.76

2) For a fundraiser, the seventh grade class sells 45 submarine sandwiches. They collect a total of $150.75. What is the cost per sub?

$150.75 \div 45 =$ $3.35

3) Ten members of the Science Club went to a history museum. It cost $7.25 for each member of the club. If 90 members went to the museum, how much would the total cost be?

$7.25 \cdot 90 =$ $652.50

4) There are 5 pink gumballs in a gumball machine at the mall. All together, the gumballs weigh 1.71 ounces. What is the weight of each gumball?

$1.71 \div 5 =$ 0.342 oz