Name_____ Date _____

Mr. Tallman

Do Now

Find the quotient. Show all work.

1) $-10.8 \div 1.2$	2) $0.96 \div (-0.03)$	3) $-7.16 \div (-0.2)$

Lesson #20 – One Step Equations with Decimals

Recall: When solving one step algebraic equations, we need to isolate the variable by performing **INVERSE OPERATIONS**.

- The inverse of addition is _____.
- The inverse of subtraction is _____.
- The inverse of multiplication is _____.
- The inverse of division is _____.

We solve one step equations involving decimals the exact same way as we solve one step equations with integers.

Example 1) Solve and check the following.

A) $x + 3 = 5$ **Check**	B) $x + 3.2 = 5.8$ **Check**

Example 2) Solve and check the following.

A) $x - 7 = -15$ **Check**	B) $x - 7.6 = -15.3$ **Check**

Example 3) Solve and check the following.

A) $-6x = 24$ **Check**	B) $-2.2x = 8.8$ **Check**

Example 4) Solve and check the following.

A) $\frac{x}{7} = -9$ **Check**	B) $\frac{x}{2.5} = -10.5$ **Check**

Now, You Try! Solve and check each equation.

1) $-4.5 = k - 3.2$ Check	2) $-12 = -4.4 + x$ Check
3) $24.2 = -1.1d$ Check	4) $-3.3h = -16.5$ Check
5) $\frac{b}{6} = -5.8$ Check	6) $\frac{f}{-3} = -2.3$ Check

Challenge:

A scuba diver is exploring at an elevation of -12.2 meters. As the diver rises to the surface, she plans to stop and rest briefly at a reef that is an elevation of -4.5 meters. Write and solve an equation to find the vertical distance that the diver traveled.