1.) Write a variable expression for each statement.

a. Eight less than the quotient of five and a number.

$\frac{5}{x} - 8$

b. The difference of twelve and a number.

$12 - x$

c. Three more than the product of a number and ten.

$3 + 10x$

2.) There are 5280 feet in a mile. Write an equation for the number of feet in an unknown number of miles. Define your variables.

EQ: $y = 5280x$ Variables: $y = ft$, $x = mi$

3.) Simplify.

$5 - |4 - 7| + 2(3 - 6((7 - 1)^2 \div 6 - 4)^3 \div 4)$

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$5 - |4 - 7| + 2(3 - 6(8) \div 4)$

$5 - |4 - 7| + 2(3 - 48 \div 4)$

$5 - |4 - 7| + 2(-9)$

$5 - |-3| + -18$

$5 - 3 - 18 = -16$

4. Write an equation to model the data in the table.

Money Spent	2	3	6	10
Gallons of Gas purchased	5.00	7.50	15.00	25.00

EQ: $y = 2.5x$ Variables: $y = Gal$, $x = \$$

5.) Is the statement true or false? If it's false, provide a counterexample: All negative numbers are integers

False - decimals
-2.5