

Name: _____

Date: 3/22/2012

Period: _____

Investigate Multiplying Integers:

Multiplication as repeated addition:

If your net worth is \$0 and you add a debt of \$5, what is your new net worth? _____

If your net worth is \$0 and you take on 3 debts of \$5 each, what is your new net worth?

What is $3 \times (-5) =$ _____

Complete the following table – look for patterns that you think make sense when multiplying positive and negative numbers.

Multiplication Patterns

5	×	4	=
5	×	3	=
5	×	2	=
5	×	1	=
5	×	0	=
5	×	-1	=
5	×	-2	=
5	×	-3	=
5	×	-4	=
5	×	-5	=

Make a conjecture (prediction) on a rule that you can use when you multiply a positive number by a negative number:

Using what you discovered about multiplying a negative \times a positive, complete the following table – look for patterns that you think make sense when multiplying a negative by a negative.

Multiplication Patterns

-5	\times	5	=
-5	\times	4	=
-5	\times	3	=
-5	\times	2	=
-5	\times	1	=
-5	\times	0	=
-5	\times	-1	=
-5	\times	-2	=
-5	\times	-3	=
-5	\times	-4	=
-5	\times	-5	=
-5	\times	-6	=

Make a conjecture (prediction) on a rule that you can use when you multiply a negative number by a negative number: