**Lesson 17 Notes: Multiplication of Integers**

**What are Integers?**

Integers are “signed” numbers.

Integers are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Why do we need Integers?**

---- Can you think of a real-world example that uses negative numbers?

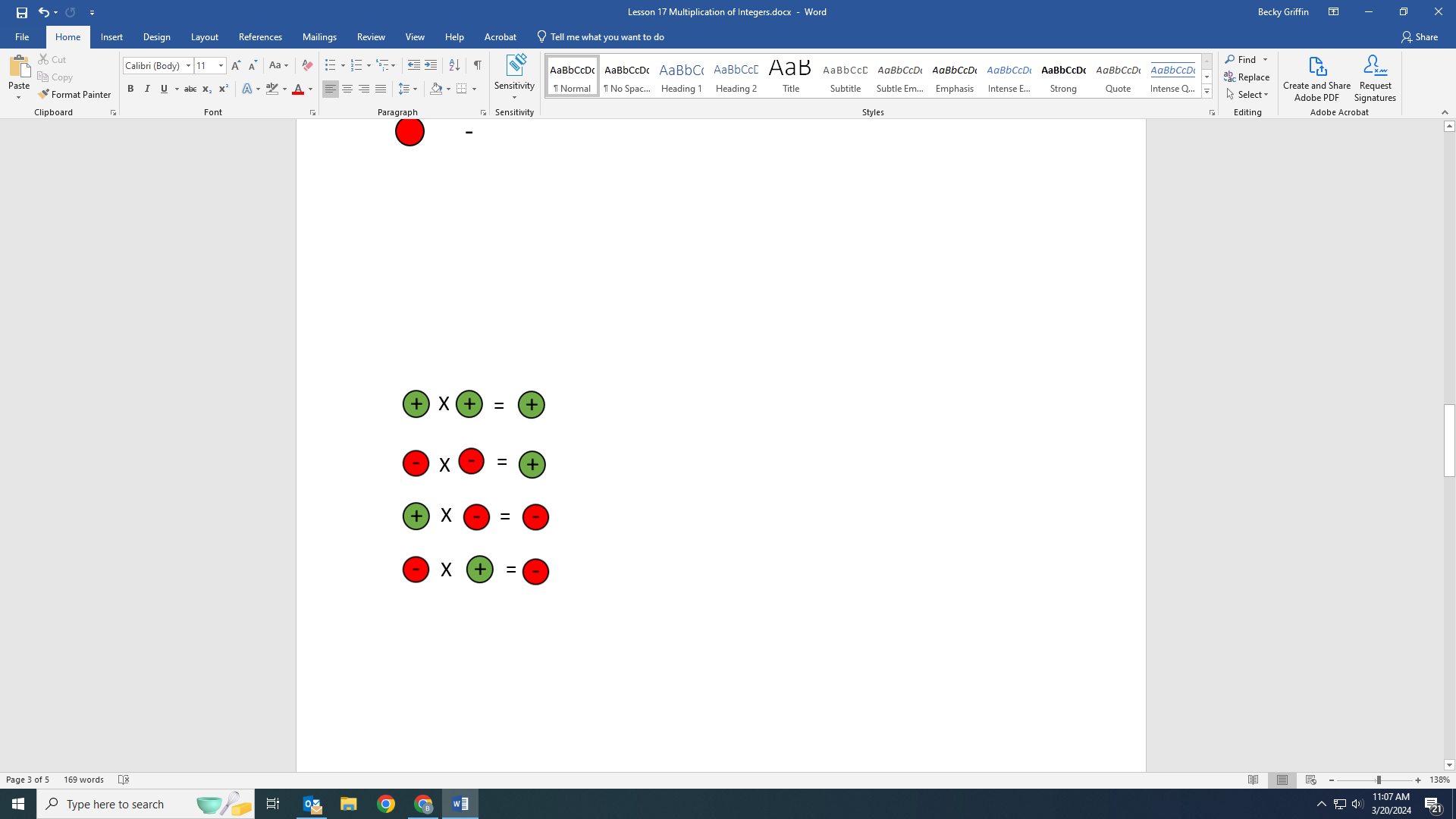
**Multiplication of Integers**

When multiplying two numbers with the same sign,

the product is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

When multiplying two numbers with unlike signs,

the product is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.



**Multiplication of Integers SUMMARY**

Positive X Positive = \_\_\_\_\_\_\_\_\_\_\_\_

Negative X Negative = \_\_\_\_\_\_\_\_\_\_\_\_

Positive X Negative = \_\_\_\_\_\_\_\_\_\_\_\_

Negative X Positive = \_\_\_\_\_\_\_\_\_\_\_\_

**What about integers raised to a power (exponent)?**

Example a: 24 = \_\_\_\_\_\_

Example b: -24 = \_\_\_\_\_\_

Example c: (-2)4 = \_\_\_\_\_\_

Example d: (-2)3 = \_\_\_\_\_\_

Example e: -23 = \_\_\_\_\_\_

Example f: -14 = \_\_\_\_\_\_

Example g: (-1)4 = \_\_\_\_\_\_

**Directions:** Find the product of each of the examples below. Show work.

**Example A:**   = \_\_\_\_\_\_

**Example B:**  = \_\_\_\_\_\_

**Example C:**   = \_\_\_\_\_\_

**Example D:**  = \_\_\_\_\_\_

**Example E:**   = \_\_\_\_\_\_

**Example F:**  = \_\_\_\_\_\_

**Example G:**   = \_\_\_\_\_\_

**Example H:**  = \_\_\_\_\_\_

**Example I:**   = \_\_\_\_\_\_

**Example J:**  = \_\_\_\_\_\_

**Example K:**   = \_\_\_\_\_\_