

Another Look

For use with Lesson 2-5.

Integer Multiplication Patterns

Multiply. Look at the signs of the factors and products.

$$\begin{array}{r}
 4 \times 4 = 16 \\
 4 \times 3 = 12 \\
 4 \times 2 = 8 \\
 4 \times 1 = 4 \\
 4 \times 0 = 0
 \end{array}
 \begin{array}{l}
 \left. \begin{array}{l} \leftarrow \\ \leftarrow \\ \leftarrow \\ \leftarrow \end{array} \right\} -4 \\
 \leftarrow \\
 \leftarrow \\
 \leftarrow
 \end{array}$$

$4 \times^{-} 1 = \underline{\hspace{2cm}}$

$4 \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

$4 \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

$4 \times \underline{\hspace{1cm}} = \underline{\hspace{2cm}}$

$$\begin{array}{r}
 4 \times^{-} 3 = \underline{\hspace{2cm}} \\
 3 \times^{-} 3 = \underline{\hspace{2cm}} \\
 2 \times^{-} 3 = \underline{\hspace{2cm}} \\
 1 \times^{-} 3 = \underline{\hspace{2cm}} \\
 0 \times^{-} 3 = \underline{\hspace{2cm}}
 \end{array}
 \begin{array}{l}
 \left. \begin{array}{l} \leftarrow \\ \leftarrow \\ \leftarrow \\ \leftarrow \end{array} \right\} +3 \\
 \leftarrow \\
 \leftarrow \\
 \leftarrow
 \end{array}$$

$^{-} 1 \times^{-} 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times^{-} 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times^{-} 3 = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times^{-} 3 = \underline{\hspace{2cm}}$

Conclusion: When one negative integer and one positive integer are multiplied, the product is _____.

Conclusion: When two negative integers are multiplied together the product is _____.

Use the patterns you have discovered to find these product.

1. $6 \times 2 = \underline{\hspace{2cm}}$

2. $6 \times^{-} 2 = \underline{\hspace{2cm}}$

3. $^{-} 6 \times^{-} 2 = \underline{\hspace{2cm}}$

4. $9 \times 5 = \underline{\hspace{2cm}}$

5. $^{-} 9 \times 5 = \underline{\hspace{2cm}}$

6. $^{-} 9 \times^{-} 5 = \underline{\hspace{2cm}}$