

## 2.4 Rules for Dividing Integers

Tuesday, September 29, 2015 8:33 AM

## Math 8 Unit 2: Integers

Name \_\_\_\_\_

### 2.4 Developing Rules to Divide Integers

Blk \_\_\_\_\_

For any multiplication of 2 different factors, there are 2 related division facts:

For  $4 \times 3 = 12$ , the related division facts are:

$$\underline{12 \div 3 = 4} \text{ and } \underline{12 \div 4 = 3}.$$

The same rules apply to the product of 2 integers.

For  $(-2)(+5) = -10$ , the related division facts are:

$$\underline{(-10) \div (+5) = -2} \text{ and } \underline{(-10) \div (-2) = +5} \quad (\text{dividend} \div \text{divisor} = \text{quotient})$$

The quotient of 2 integers with the SAME sign is **always** POSITIVE.

$$(+10) \div (+2) = +5 \quad (-10) \div (-2) = +5$$

The quotient of 2 integers with DIFFERENT signs is **always** NEGATIVE.

$$(+10) \div (-2) = -5 \quad (-10) \div (+2) = -5$$

A division expression can be written using a division sign,  $(-24) \div (-6)$ , or it can be written as a fraction,  $\frac{(-24)}{(-6)} = +4$

TRY THIS.

$$\begin{array}{r} +96 \\ -6 \\ \hline = -16 \end{array} \Rightarrow \begin{array}{r} 16 \\ 6 \overline{) 96} \\ \underline{-6} \downarrow \\ 36 \\ \underline{-36} \\ 0 \end{array}$$

Assignment: ① Worksheet 2.1-2.4 for marks, due in class.

② p 87-89 #4, 5, 7-9, 11, 12, 23

CH. 2 TEST THURSDAY OCT. 8