

MAT0028 ~ Lesson 6

Work the following examples as you listen to the recorded lecture.

Multiplying and Dividing Real Numbers

Sign Rules for Multiplying and Dividing
1. Perform the multiplication and division.
2. Count the negative signs.
3. An even number of negative signs gives a positive answer.
4. An odd number of negative signs gives a negative answer.

Example 1: $-8(5)$ Example 2: $-6(-11)$ Example 3: $-\frac{1}{8}\left(-\frac{1}{3}\right)$

The reciprocal or multiplicative inverse is

Find the reciprocal or multiplicative inverse:

Example 4: 100 Example 5: -8 Example 6: $\frac{2}{3}$

Example 7: $\frac{20}{-10}$ Example 8: $\frac{0}{-9}$ Example 9: $\frac{-5}{0}$

Example 10: $\frac{6+(-2)^2}{4-9}$ Example 11: $\frac{|-3+6|+|-2+7|}{|-2\cdot 2|}$

Example 12: $x = -5, y = -3$ $x^2 - 2y^2$