

Section 2.5 Division with Negative Numbers

1. Rule for Dividing with Positive and Negative Numbers: To divide any two numbers

- Divide their absolute values.
- The answer is positive if both the original numbers have the same sign.
- The answer is negative if the original numbers have different signs.

In other words,

- The quotient of two positive numbers is a positive number.
- The quotient of two negative numbers is a positive number.
- The quotient of a positive number and a negative number (or a negative number and a positive number) is a negative number.

Example: Simplify each of the following.

a. $25 \div (-5)$

b. $(-8) \div (-2)$

c. $(-3)(-10) \div (-6)$

d. $14 \div (-10 + 8)$

e. $-15(-2) + (-4)$

f. $-3 \bullet 6 \div (-9)$