

Lesson 12 Assessment

Dividing Integers

Dividing Integers

Relates multiplication and division of positive integers

Make 12 using two positive factors and write the related division facts.

$$\begin{aligned}2 \times 6 &= 12 \\12 \div 6 &= 2 \\12 \div 2 &= 6\end{aligned}$$

“If 2 times 6 is 12, then 12 divided by 2 is 6.”

Relates multiplication and division of negative integers

Make 12 using two negative factors and write the related division facts.

$$\begin{aligned}-2 \times (-6) &= 12 \\12 \div (-6) &= -2 \\12 \div (-2) &= -6\end{aligned}$$

“When the two factors are negative, the quotient is negative.”

Relates multiplication and division of integers with opposite signs

Make -12 using two factors and write the related division facts.

$$\begin{aligned}2 \times (-6) &= -12 \\-12 \div (-6) &= 2 \\-12 \div 2 &= -6\end{aligned}$$

“When the product is negative, the quotient may be positive or negative.”

Generalizes and applies the rules for dividing integers

$$\begin{array}{rcl}+ & \div & + = + \\+ & \div & - = - \\- & \div & + = - \\- & \div & - = +\end{array}$$

“When the dividend and divisor have the same sign, the quotient is always positive.”

Observations/Documentation