

Understanding Division of Integers - Guided Lesson Explanation

Explanation#1

Step 1) First, ignore any negatives and divide:

$$\begin{array}{r} 8 \\ 9 \overline{) 72} \\ \underline{72} \\ 0 \end{array}$$

Step 2) Now find the sign of the result. Since we divided a negative number, -72 , by a positive number, 9 , the result should be negative: -8

$$\begin{array}{r} -8 \\ 9 \overline{) -72} \end{array}$$

So the answer is -8

Explanation#2

Step 1) We will divide first by ignoring signs.

$$25 \div 5 = 5$$

Step 2) Now find the sign of the result. We divided a negative number, -25 , by a negative number, -5 , the result should be positive: 5

So $-25 \div -5 = 5$

Explanation#3

Divide the total amount of pounds by the amount each container holds.

$$\frac{1}{2} \div \frac{1}{6} = ?$$

Change this from a division problem into a multiplication problem by using the reciprocal.

$$\frac{1}{2} \div \frac{1}{6} = \frac{1}{2} \times \frac{6}{1} = \frac{3}{1}$$

Kevin will be able to fill 3 containers.

