

1.5 Dividing Integers p. 30

2 Divisor: the number you're dividing by

12 Dividend: the number you're dividing into

6 Quotient: the answer to a division problem

$$\frac{12}{2} = 6$$

$$2 \overline{)12}$$

$$12 \div 2 = 6$$

Rules for dividing with 2 integers:

same signs \rightarrow quotient is positive (even)
different signs \rightarrow quotient is negative (odd)

examples

1) $14 \div 2 = 7$

2) $\frac{-32}{-4} = 8$

3) $\frac{21}{-3} = -7$

4) $-49 \div 7 = -7$

5) $\frac{0}{6} = 0$

6) $\frac{6}{0} = \text{undefined}$

Find the mean: add #'s; divide by how many you have

1) $-5, -35, 10, \cancel{20}, \cancel{-20}$
 $-40 + 10 = \frac{-30}{5} = \boxed{-6}$

2) $(-6), (-5), \underline{6}, 3, (-2), (-8)$

$$\begin{array}{r} -6 \\ -5 \\ -2 \\ -8 \\ \hline -21 \end{array}$$

$$\frac{6}{3} = 9$$

$$\frac{-21 + 9}{6} = \boxed{-2}$$

3) $(-26), 39, (-10), (-16), 12, 31$

$$\frac{30}{6} = \boxed{5}$$

$$\begin{array}{r} -26 \\ -10 \\ -16 \\ \hline -52 \end{array} \quad \begin{array}{r} 39 \\ 12 \\ 31 \\ \hline 82 \end{array}$$