DO NOW: ANSWER KEY

opposite

1. Gary says that the additive inverse of a number is always negative. Do you agree or disagree with this statement? *Be ready to justify your response.*

   I disagree with Gary. The opposite (*additive inverse*) of a number can be negative or positive.

   For example:
   The additive inverse of 5 is -5 but the additive inverse of -6 is 6.

reciprocal

2. Betsy says that the multiplicative inverse of -12 is $\frac{1}{12}$. Do you agree or disagree with this statement? *Be ready to justify your response.*

   I disagree with Betsy. The reciprocal (*multiplicative inverse*) of a negative number is a negative number. To take the reciprocal (*multiplicative inverse*) of a number, you flip the numerator and denominator of the original number.

   For example:
   The multiplicative inverse of -12 is $-\frac{1}{12}$.

   The multiplicative inverse of 10 is $\frac{1}{10}$.

   The multiplicative inverse of $-\frac{2}{3}$ is $-\frac{3}{2}$.

   The multiplicative inverse of $\frac{1}{4}$ is 4.