12.3

Subtracting Rational Numbers

DO NOW

Explain how to find the sum of -8.46 + 5.31 in your own words.

Subtracting Integers

Subtraction is the same as adding the opposite

1. Change the minus sign to addition
2. Change the second number into the opposite
3. Do the problem like a regular addition problem

$$4 - 9 =$$

$$8 - (-12) =$$

$$-7 - 6 =$$

$$-4 - (-11) =$$

Subtracting Pos. & Neg. Fractions & MN

1) $-5\dfrac{1}{3} - \dfrac{5}{6}$

2) $4\dfrac{1}{2} - 5\dfrac{1}{4}$

Subtracting Pos. & Neg. Decimals

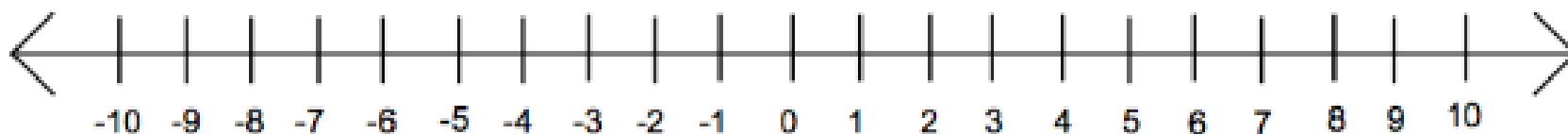3) $-8.4 - 6.7$ 4) $-20.5 - 20.5$

Adding Pos. & Neg. Decimals

5) $0.41 - (-0.07)$

Finding the Distance Between Two Numbers on a Number Line

To find the distance between the numbers, find the DIFFERENCE.

$$\xleftarrow{\quad} \begin{array}{ccccccccccccccccccccc} | & | & | & | & | & | & | & | & | & | & | & | & | & | & | & | & | & | & | & | & | \\ -10 & -9 & -8 & -7 & -6 & -5 & -4 & -3 & -2 & -1 & 0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \end{array} \xrightarrow{\quad}$$

Find the distance between -7 **and** $-3\dfrac{2}{3}$ **.**