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# Mini Lesson #3

Nov. 6th, 2020

## Warm - up

For Tasks #2 &amp; 3

Which group of numbers is in order from least to greatest?

a.  $-3.5, -\frac{13}{4}, \frac{12}{5}, 2.6, 6.2$

b.  $-\frac{13}{4}, -3.5, \frac{12}{5}, 2.6, 6.2$

c.  $-\frac{13}{4}, -3.5, 2.6, \frac{12}{5}, 6.2$

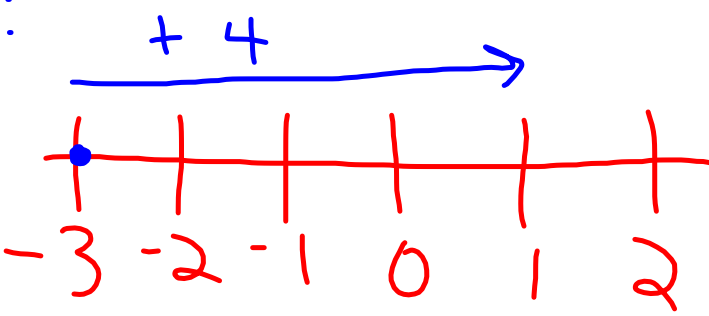
d.  $-3.5, -\frac{13}{4}, 2.6, \frac{12}{5}, 6.2$

- Writing an addition sentence

- Subtracting rational numbers

Writing an addition sentence

Ex:



$(-3) + (+4) = +1$

**Section 3.3 Subtracting Rational Numbers**

To subtract rational numbers we **ADD THE OPPOSITE**. Every subtraction problem can be rewritten as an addition problem.

**Integer Examples:**

a).  $(+5) - (+3)$   
 $(+5) + (-3)$   
 $+2$

b).  $7 - (-4)$   
 $7 + (+4)$   
 $+11$

c).  $-4 - (-2) - (+3)$   
 $-4 + (+2) + (-3)$   
 $-2 + (-3) = -5$

**Decimal Examples:**

a).  $(+0.23) - (-1.46)$   
 $(+0.23) + (+1.46)$   
 $1.69$

b).  $(-1.39) - (+2.41)$   
 $(-1.39) + (-2.41)$   
 $-3.80$

**Fraction Examples:**

- \*\*\* we still need common denominators to subtract fractions.
- \*\*\* we still need to change mixed numbers to improper fractions.

4:  
3:

a).  $\frac{5}{7} - \frac{-3}{7}$

b).  $1\frac{1}{4} - (-2\frac{2}{3})$

$-\frac{5}{4} + (+\frac{8}{3}) = -\frac{5 \times 3}{4 \times 3} + (+\frac{8 \times 4}{3 \times 4})$

$-\frac{15}{12} + \frac{32}{12}$   
 $= \frac{17}{12} = 1\frac{5}{12}$

Try These!

1.  $(-8.93) - (+1.25)$

$-10.18$

2.  $3.34 - (-1.16)$

$3.24 + (+1.16) = 4.5$

3.  $\frac{-4}{5} - \left(\frac{-1}{2}\right)$

4.  $1\frac{1}{6} - \frac{3}{4}$

Answers: 1.  $-10.18$  2.  $4.5$  3.  $\frac{-3}{10}$  4.  $\frac{5}{12}$

$$\begin{aligned}
 3. \quad & \frac{-4}{5} - \left(\frac{-1}{2}\right) \\
 & \frac{-4 \times 2}{5 \times 2} + \left(\frac{+1}{2} \times 5\right) \times 5 \\
 & \frac{-8}{10} + \frac{5}{10} \\
 & = \frac{-3}{10}
 \end{aligned}$$

$$\begin{aligned}
 4. \quad & 1\frac{1}{6} - \frac{3}{4} \\
 & \frac{7}{6} + \left(\frac{-3}{4}\right) \times 3 \\
 & \frac{14}{12} + \left(\frac{-9}{12}\right) \\
 & = \frac{5}{12}
 \end{aligned}$$

End of Mini Lesson #2