Curriculum Outcome

N1: Demonstrate an understanding of rational numbers by: comparing and ordering rational numbers; solving problems that involve arithmetic operations on rational numbers.

Student Friendly:
"Adding fractions and adding decimals."

Improper vs. Mixed Numbers

$$\frac{7}{3}$$

This is an improper fraction.

(The numerator is LARGER than the denominator.)

Mixed number:
Integer + Fraction

$2 \tfrac{1}{3}$

You try: $\dfrac{^{-}15}{4}$

$= -3\tfrac{3}{4}$

<u>WARM-UP:</u>

Change the improper fraction below to a mixed number:

$$\frac{-25}{7}$$

$$= -3\frac{4}{7}$$

HOME LEARNING:
Page 102 - Questions:
14aceg, 16bf, 17ac and 21

SOLUTIONS:

Decimals to Fractions:

0.8

$= \dfrac{8}{10} \begin{array}{l} \div 2 \\ \div 2 \end{array}$

$= \dfrac{4}{5}$

$0.\overline{2}$

$= \dfrac{2}{9}$

$0.\overline{18}$

$= \dfrac{18}{99} \begin{array}{l} \div 3 \\ \div 3 \end{array}$

$= \dfrac{6}{33}$

<u>Changing mixed Numbers to improper fractions:</u>

$2 \frac{5}{6}$

$= \frac{17}{6}$

$-3 \frac{1}{8}$

$= -\frac{25}{8}$

You try:

$5 \frac{3}{7}$

$= \frac{38}{7}$

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

$= -\frac{13}{3}$

Arrange the numbers from least to greatest.
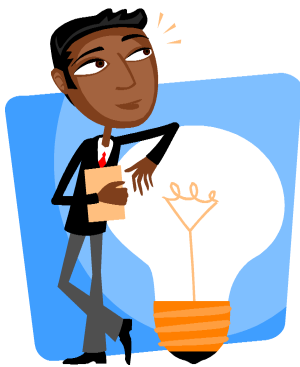
$$-\frac{3}{8}, \frac{5}{9}, -\frac{10}{4}, -1\frac{1}{4}, \frac{7}{10}, \frac{8}{3}$$

-0.375 ③

$0.\overline{5}$ ④

-2.5 ①

-1.25 ②

0.7 ⑤

$2.\overline{6}$ ⑥

$L \text{ to } G: \quad \frac{-10}{4} ; \quad -1\frac{1}{4} ; \quad -\frac{3}{8} ; \quad \frac{5}{9} ; \quad \frac{7}{10} ; \quad \frac{8}{3}$

Find two rational numbers between the following pairs of numbers.

(May use decimal numbers.)

$\dfrac{-3}{8}$ $\dfrac{-4}{8}$

= -0.375   = -0.5

−0.4   −0.38

(NO decimal numbers, please!)

$\dfrac{5}{8}$ ×3 ×3 $\dfrac{6}{8}$ ×3 ×3

Go to a bigger denominator;
find equivalent fractions.

$\dfrac{15}{24}$ $\dfrac{18}{24}$

$\dfrac{16}{24} \genfrac{}{}{0pt}{}{÷8}{÷8}$ $\dfrac{17}{24}$

$= \dfrac{2}{3}$

Which rational number is larger?

(May use decimal numbers.)

$$\frac{12}{15} < \frac{13}{16}$$

$$= 0.8\overline{0}$$

$$= 0.8125$$

(NO decimal numbers, please!)

$$\frac{2}{3} \begin{matrix} \times 4 \\ \times 4 \end{matrix} < \frac{3}{4} \begin{matrix} \times 3 \\ \times 3 \end{matrix}$$

$$= \frac{8}{12}$$

$$= \frac{9}{12}$$

Show your work!

Which rational number is larger?

-1   -3 $\vdots$ -0.5   -0.75

(Be careful with negative numbers...)

It is now time for HOME LEARNING!!!

HOME LEARNING:
Page 103 - Questions:
24ac

Also, explore our period 2 math team on the "Teams" app in Office 365 (search, "office.com" using a search engine then login using your email address / password). The Teams icon is on the left side and looks like this: **T** Teams

Once you are in our team, go into "Class Notebook", click on the purple arrow in the top left corner then click on the folder with you name on it, go into "Daily Lessons" and check out "3.2 Blank Lesson" in order to be prepared for Thursday's class.

You can either print or hand write your notes in advance which will allow me to teach more quickly and give you time to practice adding rational numbers while you're in class with me. :)