Grade 9 Warm Up

Put the following fractions in order from least to greatest.

1)

$$\underset{-0.73}{\frac{-11}{15}}, \underset{-0.29}{\frac{-2}{7}}, \underset{-0.95}{\frac{-21}{22}}, \underset{-0.20}{\frac{-1}{5}}, \underset{-0.10}{\frac{-1}{10}}$$

$$-\frac{21}{22}, \frac{-11}{15}, -\frac{2}{7}, -\frac{1}{5}, -\frac{1}{10}$$

ERASE

G

Grade 9 Warm Up

LCM   6 | 6, 12, 18, 24, ㉚
        5 | 5, 10, 15, 20, 25, ㉚

Determine each sum.

1) $\dfrac{-5 \times 5}{6 \times 5} + \left(\dfrac{-2 \times 6}{5 \times 6}\right)$

$$\dfrac{-25}{30} + \dfrac{-12}{30}$$

$$-\dfrac{37}{30} = -1\dfrac{7}{30}$$

2) $\dfrac{8 \times 4}{3 \times 4} + \dfrac{5 \times 3}{4 \times 3}$

$$\dfrac{32}{12} + \dfrac{15}{12}$$

$$\dfrac{47}{12} = 3\dfrac{11}{12}$$

3) $-1\dfrac{2}{3} + \left(-3\dfrac{1}{5}\right)$

$$-\dfrac{5 \times 5}{3 \times 5} + \left(-\dfrac{16 \times 3}{5 \times 3}\right)$$

$$-\dfrac{25}{15} + \left(\dfrac{-48}{15}\right)$$

$$-\dfrac{73}{15} = -4\dfrac{13}{15}$$

b) On December 17th, the temperature was 2.1^oC less than (colder than) that of December 18th. What was the temperature on the 17th?

4) On December 18th, the temperature in Miramichi was -21.6^{o}C.
By noon the next day, the temperature increased by 3.7^{o}C.

    a) What was the temperature at noon on December 19th?

$$-21.6 + 3.7 = -17.9$$

On Dec 19th @ noun it
was -17.9°C

b) On December 17th, the temperature was 2.1^{o}C less than (colder than)
that of December 18th. What was the temperature on the 17th?

$$-21.6 - 2.1 = -23.7°C$$

Any Homework Questions?

p. 112 - 113

11(acegi) (Without calculator)
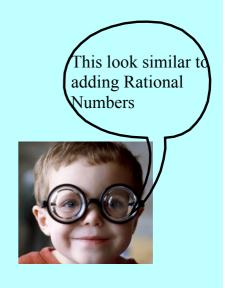
13, 16, 17, 18, 19(a, c), 20(ac)

11. c) $\quad -\dfrac{11^{\times 5}}{4^{\times 5}} + \left(-\dfrac{6^{\times 4}}{5^{\times 4}} \right)$

$$\dfrac{-55}{20} + \dfrac{-24}{20}$$

$$\dfrac{-79}{20} = -3\,\dfrac{19}{20}$$

Section 3.3
Subtracting Rational Numbers

When subtracting Rational Numbers you must have a ...

Common Denominator
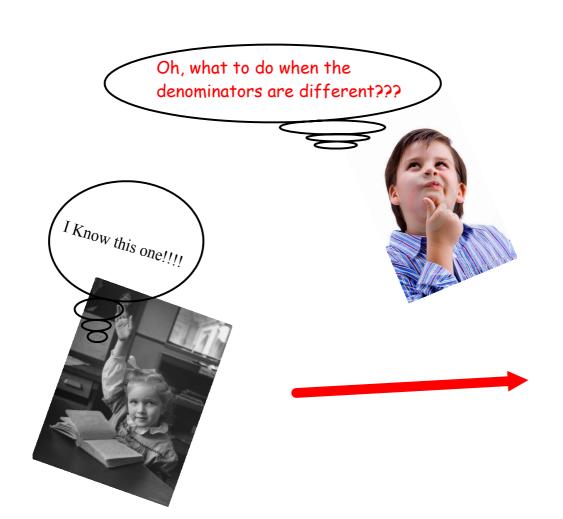
This look similar to adding Rational Numbers

Ex) $\quad \dfrac{13}{7} - \dfrac{4}{7} =$

Same Denominators

You try ...

(Remember to write all solution in simplest form)

1)
$$\frac{21}{2} - \frac{24}{2}$$

$$\frac{-3}{2}$$

2)
$$\frac{-25}{13} - \frac{16}{13}$$

$$\frac{-25}{13} + \frac{-16}{13}$$

$$-\frac{41}{13}$$

3)
$$\frac{11}{4} - \frac{5}{4} \div \frac{6}{4} = 1\frac{2}{4}$$

$$1\frac{1}{2}$$

Oh, what to do when the denominators are different???

I Know this one!!!!

When denominators are different you have to find a **"common denominator"**

How

By determining the LCM

Lowest Common Multiple

(of the denominators)

Subtract the following rational numbers

$$\frac{13}{7} \times 3 - \frac{4}{3} \times 7$$

$$\frac{39}{21} - \frac{28}{21}$$

$$\frac{11}{21}$$

Look at the multiples of each denominator

Find the LCM

7   3

HOMEWORK

You try...

1) $\dfrac{17}{12} - \dfrac{4}{9}$

2) $2\dfrac{1}{5} - 5 + \dfrac{2}{3}$

$\dfrac{11}{5} - \dfrac{10}{2} + \dfrac{2}{3}$

3) $\dfrac{-2}{7} - \dfrac{5}{28}$