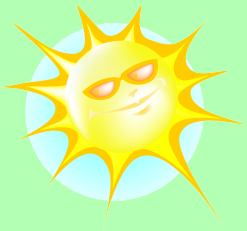
Curriculum Outcome

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."



3.2 Adding Rational Numbers

Addition of Integers

COPY DOWN!

To determine if the answer to an addition of integers will be positive or negative:

If the signs are the same:

Keep the same sign, and ADD.

Ex. (-4) + (-2)= -6

If the signs are different:

Cover up the signs.

Find the biggest number.

Take the sign of the BIGGEST number.

Ex. (-8) + (2)= -6

Eight is bigger than 2, when you don't look at the negative sign.

We use the same rules with decimals:

1) (-2.1) + (-1.7) = _____

2) (-6.8) + 1.5 = _____

3) (-7.1) + 12.3 = _____

If you use a calculator, make sure you know how to input negative numbers!

Adding Fractions

When adding fractions you need a COMMON DENOMINATOR:

1) $\frac{-5}{8} + \frac{6}{8}$

$=$

2) $\frac{-8}{7} + \frac{-4}{7}$

$=$

$$\frac{3}{5} + \frac{4}{-5}$$

Find a Common Denominator by determining the LCM.

L

C

M

$$\frac{3}{4} + \frac{-5}{6}$$

Find the LCM first!

$= \frac{\quad}{\quad} + \frac{\quad}{\quad}$

$= \frac{\quad}{\quad}$

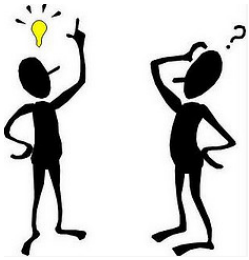
You try:

$$\frac{3}{5} + \frac{1}{6}$$

=

=

What about mixed numbers?



$$2\frac{1}{3} + 2\frac{3}{5}$$

Step 1: Write each mixed number as an improper fraction.

$$\frac{\quad}{3} + \frac{\quad}{5}$$

Step 2: Find a common denominator, and then add numerators.

$$\frac{\quad}{\quad} + \frac{\quad}{\quad}$$

$$\frac{\quad}{\quad}$$

$$\frac{\quad}{\quad}$$

You try!

1) $5\frac{7}{8} + (-3\frac{1}{2})$

$=$ 

$=$ 

$=$ 

$=$ 

You try!

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

$=$

$=$

$=$

$=$

It is now time for HOME LEARNING!!!

HOME LEARNING:

Pages 111 to 113 - Questions:

8 (all; use fractions - no calculator)

9acf (use calculator)

11acegi (no calculator)

13, 16, 17abc, 18, 19ac, 20ac

NOTE:

Don't just give answers - you must copy down the question first. You must show work when you see fractions. Ignore anything about "number lines".