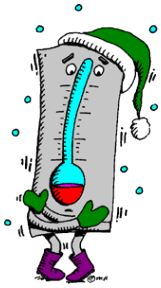
Curriculum Outcome

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"



Warm Up

Grade 9

Determine the sum of each of the following

1) $\frac{-3}{7}+\left(\frac{-3}{7}\right)=$ $\frac{-6}{7}$

2) a) $2.7 + 1.8$ = 4.5

b) $-3.7 + 4.5$ = 0.8

c) $2.7 + (-8.7)$ = −6

Class/Homework

Page 111 - 112

Don't just give answers copy down the addition statement (Not directions)

5 (bc) Use Calculators no # line needed
6 (all) Use Calculators no # line needed
7 (ac) Leave in fractional form (no calculator)
9 (acf) Use Calculators

Copy Down

Adding Fractions

When adding fractions you need a COMMON DENOMINATOR:

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

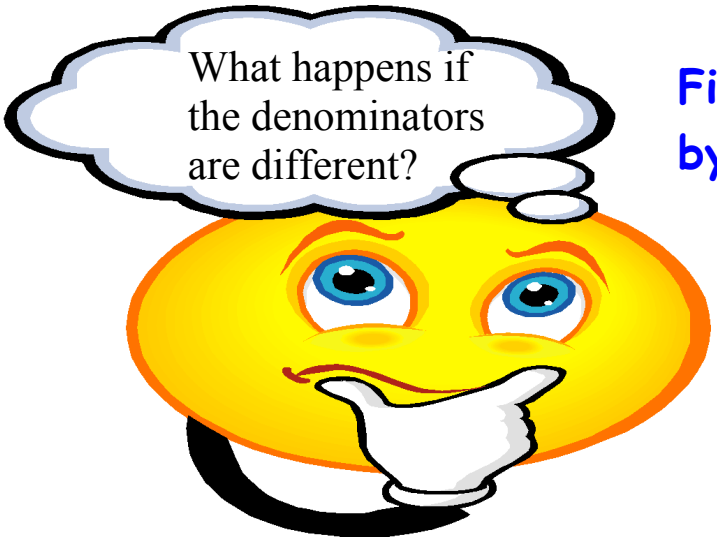
$=$

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

$=$

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

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



Find a Common Denominator by determining the LCM.

L owest

C ommon

M ultiple

Find a common denominator:

$$\frac{4}{5} + \frac{8}{3}$$

$\times 3$ $\times 5$

$$= \frac{12}{15} + \frac{40}{15}$$

$$= \frac{52}{15}$$

Multiples

5 3

3, 6, 9, 12, 15, 18

5, 10, 15

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

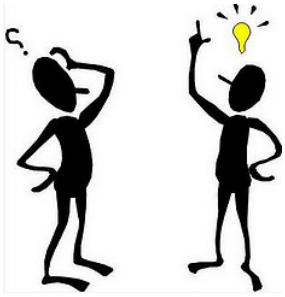
Find the LCM first!

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

What about mixed numbers?

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

Option 1



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

$\frac{7}{3} + \frac{13}{5}$

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

$\frac{35}{15} + \frac{39}{15}$

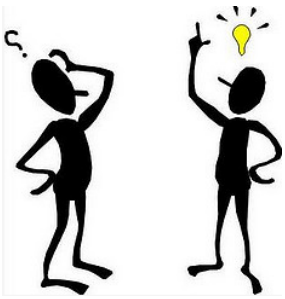
$= \frac{74}{15}$

$= 4\frac{14}{15}$

What about mixed numbers?

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

Option 2



Step 1: Add Integers together .

$2 + 2 = \boxed{4}$

Step 2: Add Fractional parts together (must have common denominators).

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

x5 x3

$\frac{5}{15} + \frac{9}{15}$

$\boxed{\frac{14}{15}}$

$4 + \frac{14}{15} = \boxed{4\frac{14}{15}}$

$1\frac{3}{4} + 2\frac{3}{5}$

Practice!

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

$\frac{47}{8} + \left(\frac{-7}{2}\right)$ ×4

$\frac{47}{8} + \frac{-28}{8}$

$= \frac{19}{8}$

$= 2\frac{3}{8}$

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

$5 + (-3)$

$= \boxed{2}$

$\frac{7}{8} + \left(\frac{-1}{2}\right)$

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

$\boxed{\frac{3}{8}}$

$2 + \frac{3}{8} = 2\,3/8$

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

$-\frac{5}{3} + -\frac{9}{4}$

$\times 4$ $\times 3$

$-\frac{20}{12} + -\frac{27}{12}$

$= -\frac{47}{12}$

$= -3\frac{11}{12}$

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

$-1 + -2$

$= -3$

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

$-\frac{8}{12} + -\frac{3}{12}$

$= -\frac{11}{12}$

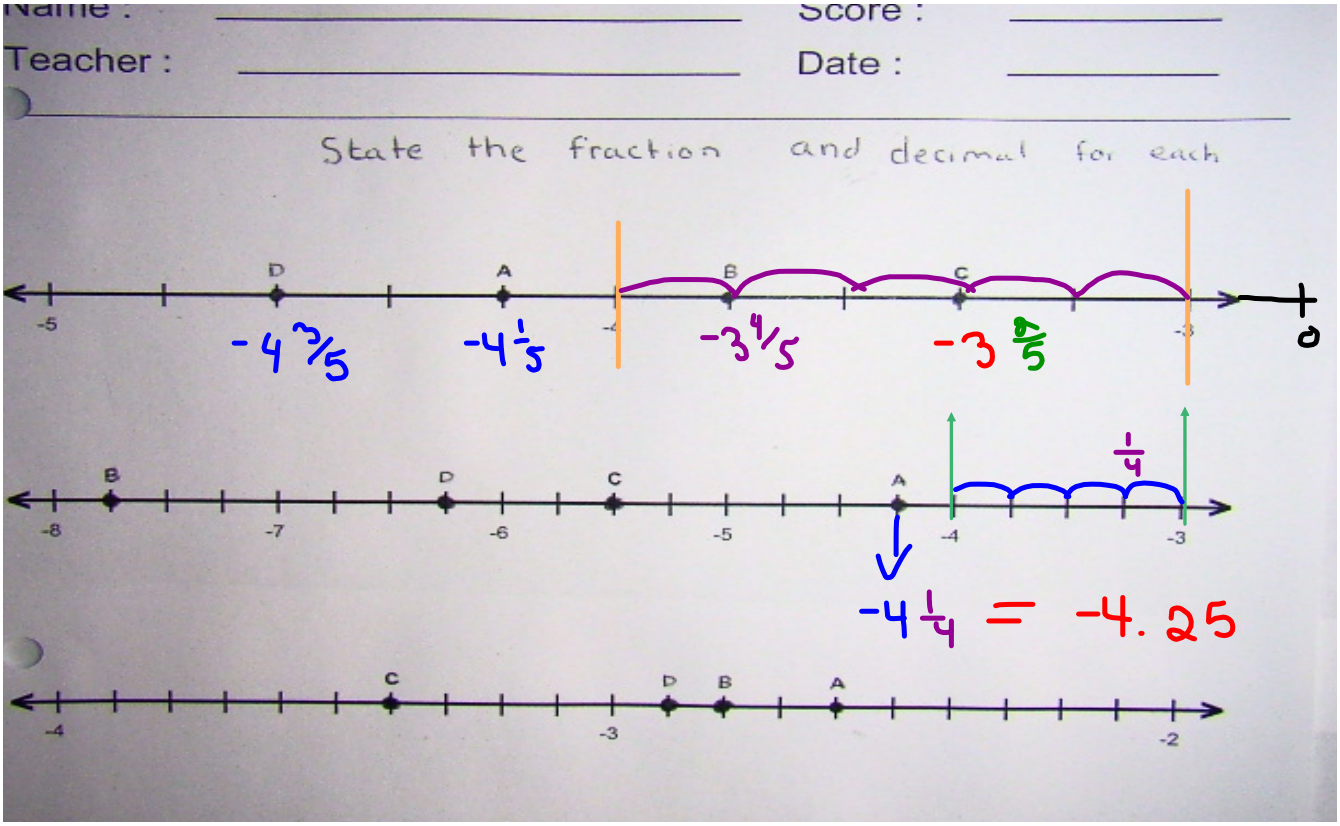
$-3\frac{11}{12}$

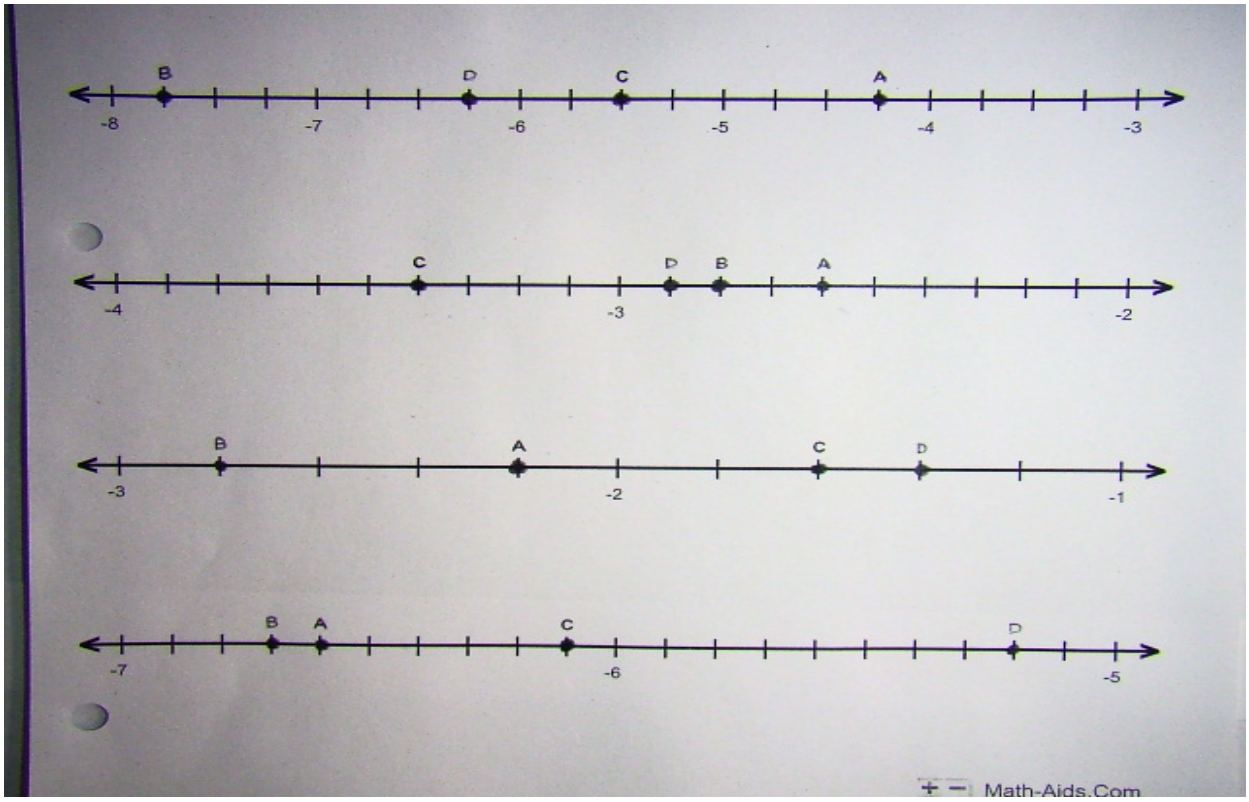
Classwork / Homework:

p. 111 - 113

11(acegi) (MUST USE COMMON DENOMINATOR)

13, 16, 17(a, b, c), 18


Name :
Score :
Teacher :
Date :
State the fraction and decimal for each
D
A
B
C
-5
-4
-3
0
$-4\frac{3}{5}$
$-4\frac{1}{5}$
$-3\frac{4}{5}$
$-3\frac{5}{5}$
B
D
C
A
-8
-7
-6
-5
-4
-3
$\frac{1}{4}$
$-4\frac{1}{4} = -4.25$
C
D
B
A
-4
-3
-2


B
D
C
A
-8
-7
-6
-5
-4
-3
C
D
B
A
-4
-3
-2
B
A
C
D
-3
-2
-1
B
A
C
D
-7
-6
-5
Math-Aids.Com

Classwork / Homework:

p. 111 - 113

Must show work when you see fractions

11(b,d,f,h,j) (Without calculator)

13, 16, 17(a, b, c), 18, 19(a, c), 20(ac)