Fractions Review

Nov 7/13

① Changing mixed to improper

a) $3\frac{2}{7}$

$= \frac{3 \times 7 + 2}{7}$

$= \frac{23}{7}$

b) $-5\frac{1}{8}$

$= \frac{-5 \times 8 + 1}{8}$

$= \frac{-41}{8}$

② Write in lowest terms → divide top/bottom by 2, 3, 5, 7, 11

a) $\frac{6 \div 2}{8 \div 2}$

$= \frac{3}{4}$

b) $\frac{-30}{35} \overset{\div 5}{}$

$= \frac{-6}{7}$

c) $\frac{-42}{18} \overset{\div 6}{}$

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

Remember to take the sign with you to the answer

③ Multiplying Fractions

a) $-1\frac{3}{5} \times \frac{3}{4}$ Change to improper fractions

$= -\frac{8}{5} \times \frac{3}{4}$ Multiply the numerators
Multiply the denominators

$= \frac{-24 \overset{\div 4}{}}{20 \underset{\div 4}{}}$ Reduce

$= -\frac{6}{5}$

④ Dividing Fractions

a) $-\frac{2}{9} \div -\frac{13}{3}$ Change to improper fractions

$= -\frac{2}{9} \times -\frac{3}{13}$ Flip the second fraction and change the division to multiplication

$= \frac{6}{117} \overset{\div 3}{\div 3}$ Reduce

$= \frac{2}{39}$

⑤ Adding fractions

a) $-\frac{3}{5} + (-2\frac{1}{4})$

Multiply the denominators to find a common one

$= -\frac{3}{5} + \left(-\frac{9}{4}\right)$

Multiply tops & bottoms

$= \frac{-12}{20} + \frac{-45}{20}$

Add the numerators

$= \frac{-57}{20}$

⑥ Subtracting Fractions

*same as addition
- find a common denominator
- subtract the numerators
- reduce

Practice with Fractions Review #1-5