Fractions HW 3

1. Word problems: Write and solve word problems for the numerical problems:

a. $\frac{5}{8}+\frac{7}{8}$

b. $\frac{3}{4}+\frac{2}{5}$

c. $\frac{9}{8}-\frac{3}{8}$ (write a take-away type problem)

d. $\frac{3}{4}-\frac{2}{5}$ (write a take-away type problem)

e. $\frac{9}{8}-\frac{3}{8}$ (write a compare type problem)

f. $\frac{3}{4}-\frac{2}{5}$ (write a compare type problem)

g. $\frac{2}{3}\times\frac{4}{5}$ (write a "groups-of" type problem)

h. $\frac{5}{4}\times\frac{3}{8}$ (write a "groups-of" type problem)

**Computation problems:**

2. Simplify the fraction $\frac{42}{90}$

a. Using division
b. By factoring

3. Find the least common denominator and use it to add or subtract these fractions:

a. $\frac{5}{12}+\frac{23}{30}$

b. $\frac{7}{8}-\frac{15}{28}$

4. Multiply these fractions and simplify (you can simplify as you go or at the end)

a. $\frac{24}{35}\times\frac{75}{14}$

b. $\frac{36}{25}\times\frac{20}{27}$

**Explain these concepts and processes**:

5. By making an analogy to whole number multiplication, explain why $\frac{1}{2}\times\frac{3}{4}$ means 1/2 of 3/4.

6. Draw a diagram to show the meaning of $\frac{3}{5}\times\frac{3}{8}$ (a diagram that clearly shows what 2/3 of 4/5 is). Use the diagram to explain why that amount is $\frac{2\times4}{3\times5}$ .