HW handouts don’t have space to work like Activity handouts do; use your own paper, and staple this to it. Print out and color the Fraction Tiles on my web page for answering the following (solutions are online):

1. (a) The rectangle below represents 5/6 of some whole. Trace it, then draw a region representing 1/2 of the same whole.

![Rectangle diagram]

(b) Now the rectangle is worth 8/3 of the whole. Trace it, then draw a region representing 4/5 of the same whole.

2. (a) The diagram below represents 1/2 of some whole. Trace it, then draw a diagram representing 4/3 of the same whole.

![Diamond diagram]

(b) The diagram is worth 3/2 now. Trace it, then draw a region representing 1/4 of the same whole.

3. (a) If the hexagon below represents 2/3 of a whole, trace it and draw a diagram that represents 1/2 of the same whole.

![Hexagon diagram]

(b) If the same hexagon now represents 3/4 of the whole, draw a diagram representing 1/2 of the same whole. (Trace the original.)

4. (a) If 3 blue tiles are worth 4/5, how would you represent the whole? Explain.

(b) If a yellow tile is worth 3/4, how would you represent 1/2 of the same whole? Explain.

(c) If a yellow tile is worth 3/2, how would you represent 1/4 of the same whole? Explain.

(d) If 2 orange tiles are worth 4/3, how would you represent 3/4 of the same whole? Explain.

(e) If a yellow tile is worth 2 (i.e. 2 wholes), how would you represent 2/3? Why?
1. (a) The rectangle is made up of 5 pieces now, and each is worth 1/6 of the unknown whole (label them as such to make it easier). Put 6 of your sixths together to make the correct whole, then cut THAT into 2 same-size pieces and shade one such piece.

(b) Show that the rectangle is cut into 8 pieces, each of which is worth (labeled) 1/3 of the unknown whole. Keep just 3 of your thirds to make the correct whole, and cut THAT into 5 pieces, keeping 4 of those new pieces.

2. (a) It takes 2 halves to make a whole, so put two full parallelograms together to make the whole for this problem. Now cut that whole into 3 same-size pieces and keep 4 of them.

(b) The diagram is made of 3 pieces now, each worth (labeled) 1/2 of the whole. So put just 2 of those halves together to create the correct whole, and cut that into four same-size pieces, keeping just 1 of them.

3. (a) Here, cut the hexagon horizontally to make 2 trapezoids, each worth 1/3 of the whole. The whole will be represented by 3 of those trapezoids (put the third one underneath like a pedestal). Now cut this new whole vertically into 2 pieces and keep one of them.

(b) As above, cut the hexagon into 3 identical rhombus sections each worth 1/4 of the whole and represent the whole by the original hexagon just touching at one corner one additional rhombus standing on end to the right side. Cut this diagram into two pieces horizontally and keep one of them. (Alternatively, think of 3/4 as 6/8. As above, the hexagon can be cut into 6 triangles. Use 8 of them to represent the whole, and then keep 4 to show 4/8, which is equivalent to 1/2.)

4. (a) 5 green – (Strategy: find the unit fraction 1/5 first.) If the 3 blue side-by-side are worth 4/5, that means that shape is made up of 4 pieces, each of which is 1/5 of the whole. One green is worth 1/5, because it takes 4 green to fill the 3-blue area. The whole is worth 5/5, so 5 green.

(b) 1 orange – (Strategy: find the unit fraction 1/4 first.) One blue is worth 1/4, because we’ve kept 3 of the blue to make the yellow 3/4. Then the whole 4/4 is 4 blue. Now 1/2 is 1 orange because 2 orange make the whole.

(c) 5 pink – (Strategy: find the unit fraction 1/2 first.) One blue is worth 1/2, because we’ve kept 3 blue to make the yellow 3/2. Then the whole 2/2 is 2 blue. Now 1/4 is 1 pink, because 4 pink make the whole. Keep 5 pink.

(d) 3 green – (Strategy: find the unit fraction 1/3 first.) One blue is worth 1/3, because 4 blue were kept to make the 2 orange be worth 4/3. Then the whole 3/3 is 3 blue. Now 1/4 is 1 green, because 4 green make the whole. Keep 3 green.

(e) 2 pink – (Strategy: find a single whole first, then 1/3, then 2/3.) One red is the whole, because two red make a yellow. Then a pink is 1/3, because it takes 3 pink to make a whole. Keep 2 of the pink.