Name _____ Date _____

1. Are the following greater than or less than 1? Circle the correct answer.

a)	$\frac{1}{2}+\frac{4}{9}$	greater than 1	less than 1
b)	$\frac{5}{8}+\frac{3}{5}$	greater than 1	less than 1
c)	$1\frac{1}{5}-\frac{1}{3}$	greater than 1	less than 1
d)	$4\frac{3}{5}-3\frac{3}{4}$	greater than 1	less than 1

2. Are the following greater than or less than 1/2? Circle the correct answer.

e)	$\frac{1}{5}+\frac{1}{4}$	greater than $\frac{1}{2}$	less than $\frac{1}{2}$
f)	$\frac{6}{7}-\frac{1}{6}$	greater than $\frac{1}{2}$	less than $\frac{1}{2}$
g)	$1\frac{1}{7}-\frac{5}{6}$	greater than $\frac{1}{2}$	less than $\frac{1}{2}$
h)	$\frac{4}{7}+\frac{1}{8}$	greater than $\frac{1}{2}$	less than $\frac{1}{2}$

3. Use > , < , or = to make the following statements true.

i) $5\frac{4}{5}+2\frac{2}{3}$ ___<___ $8\frac{3}{4}$

j) $3\frac{4}{7}-2\frac{3}{5}$ ___<___ $1\frac{4}{7}+\frac{3}{5}$

k) $4\frac{1}{2}+1\frac{4}{9}$ ___>___ $5+\frac{13}{18}$

l) $10\frac{3}{8}-7\frac{3}{5}$ ___<___ $3\frac{3}{8}+\frac{3}{5}$

NOT EQUAL

4. Is it true that $5\frac{2}{3} - 3\frac{3}{4} = 1 + \frac{2}{3} + \frac{3}{4}$? Prove your answer.

$5\frac{2}{3} - 3\frac{3}{4}$

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

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

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

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

5. A tree limb hangs $5\frac{1}{4}$ feet from a telephone wire. The city trims back the branch before it grows within $2\frac{1}{2}$ feet of the wire. Will the city allow the tree to grow $2\frac{3}{4}$ more feet?

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

$= 2 + \frac{1}{4} + \frac{1}{4} = 2\frac{1}{2}$

Once the tree grows $2\frac{3}{4}$ feet it will be exactly $2\frac{1}{2}$ feet from the wire, so the city would trim it.

6. Mr. Kreider wants to paint two doors and several shutters. It takes $2\frac{1}{8}$ gallons of paint to coat each door and $1\frac{3}{5}$ gallons of paint to coat his shutters. If Mr. Kreider buys three 2-gallon cans of paint, does he have enough to complete the job?

$2\frac{1}{8} + 2\frac{1}{8} + 1\frac{3}{5} = 4\frac{2}{8} + 1\frac{3}{5} = 5\frac{2}{8} + \frac{3}{5} = 5\frac{10}{40} + \frac{24}{40} = 5\frac{34}{40}$

$5\frac{34}{40} < 6$

Mr. Kreider has enough paint to complete the job.