Fourth grade lesson plans

April 20 - Math - 4.NF.1
April 21 - Social Studies - Arkansas Governor
April 22 - Math - 4.NF.2
April 23 - Social Studies - Arkansas Colleges and Pt.2
April 27 - Math - 4.NF.3
April 28 - Social Studies - My Geography and State Geography
**April 29 - Math 4.NF.3**
April 30 - Social Studies - Largest City and State Capital

4.NF.1 Equivalent Fractions

I can explain equivalent fractions by using visual fraction models, and recognize and generate equivalent fractions.

Equivalent Fractions:
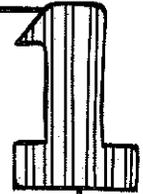
In the model below, fractions equivalent to ½ are shaded. Notice that although the fractions are different, they are the same size. These are equivalent fractions.

1		

$\frac{1}{2}$ →

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

$\frac{2}{4}$ →

| $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ | $\frac{1}{4}$ |
| $\frac{1}{5}$ | $\frac{1}{5}$ | $\frac{1}{5}$ | $\frac{1}{5}$ | $\frac{1}{5}$ |

$\frac{3}{6}$ → $\frac{1}{6}$ $\frac{1}{6}$ $\frac{1}{6}$ $\frac{1}{6}$ $\frac{1}{6}$ $\frac{1}{6}$

$\frac{4}{8}$ → $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$ $\frac{1}{8}$

$\frac{5}{10}$ → $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$ $\frac{1}{10}$
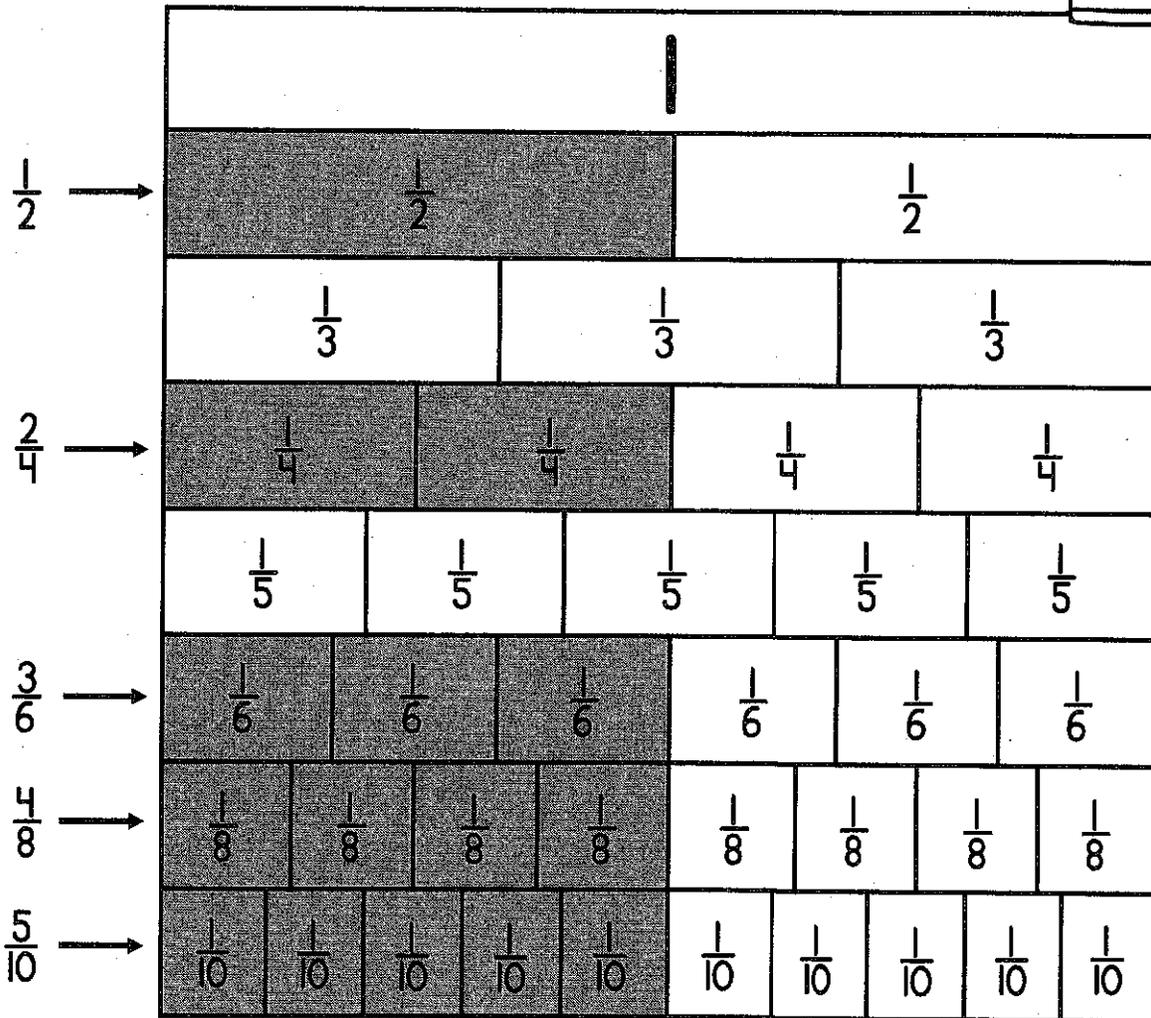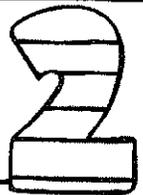
Use the model to list fractions equivalent to $\frac{1}{2}$: _____

Use the fraction bars to find Equivalent Fractions...

$\dfrac{2}{3}$ = ____

$\dfrac{3}{4}$ = ____

$\dfrac{3}{5}$ = ____
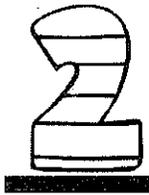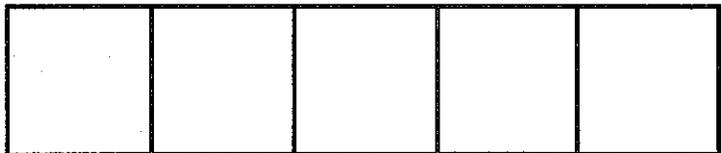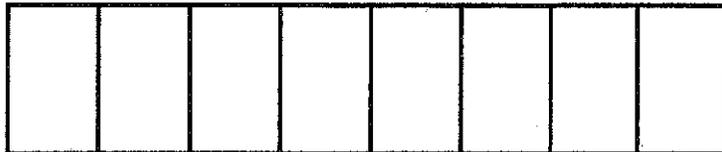
To find equivalent fractions, you can also multiply both the numerator and denominator by a fraction equivalent to 1.

$\dfrac{1}{5} \times \dfrac{2}{2} = \dfrac{2}{10}$ $\dfrac{2}{3} \times \dfrac{3}{3} = —$ $\dfrac{1}{6} \times \dfrac{4}{4} = —$

Arkansas Governor...
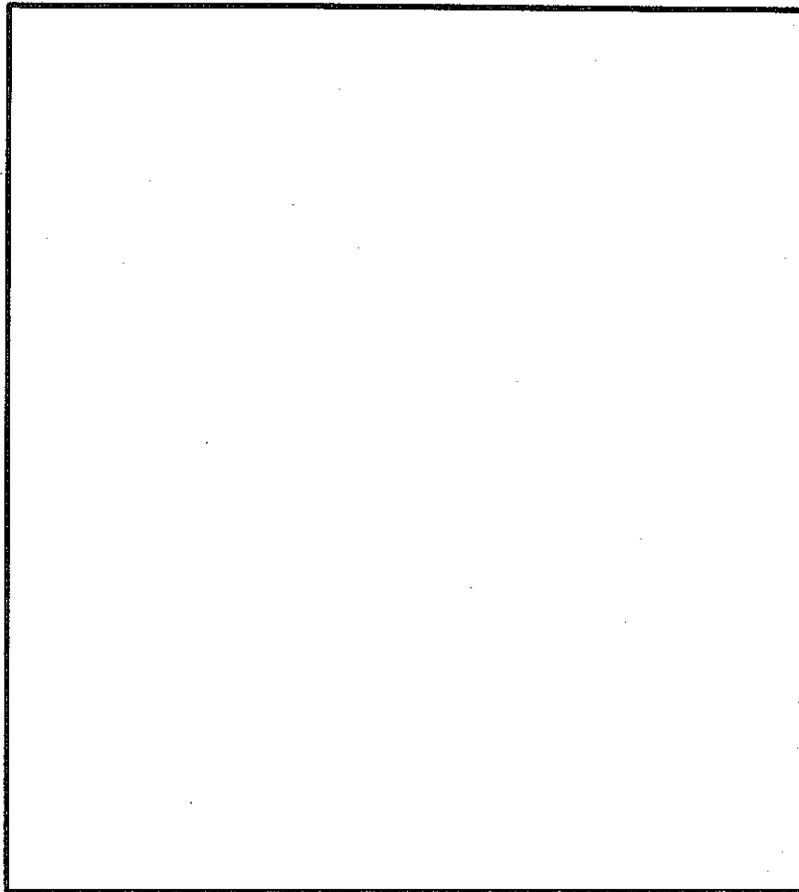
Insert a picture of your Governor and write a description of his/her work in your state.

_____

_____

_____

_____

_____

_____

4.NF.2 ► Comparing Fractions

I can compare two fractions with different numerators and different denominators, by creating common numerators or denominators or by comparing to a benchmark fraction.

Strategies for Comparing Fractions:

{Use these strategies to compare $\frac{1}{4}$ and $\frac{2}{3}$ }

Use a fraction model:

$\frac{1}{4}$ [ ]

Divide the bar into equal fourths and shade one bar.

$\frac{2}{3}$ [ ]

Divide the bar into equal thirds and shade two bars.

Compare the shaded models.

Compare to a benchmark like $\frac{1}{2}$:

Less than ½ → $\frac{1}{4}$

$\frac{3}{4}$

0        $\frac{1}{3}$ $\frac{1}{2}$ $\frac{2}{3}$ 1

More than ½
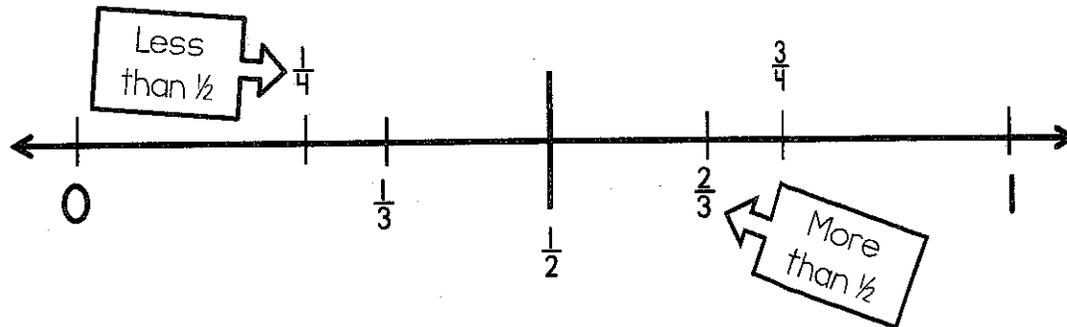
Find common denominators:

To compare $\frac{1}{4}$ and $\frac{2}{3}$, find common denominators by finding equivalent fractions with the same denominator. Then compare.

$\frac{1}{4} \begin{smallmatrix} \times 3 \\ \times 3 \end{smallmatrix} = \frac{3}{12}$ $\frac{2}{3} \begin{smallmatrix} \times 4 \\ \times 4 \end{smallmatrix} = \frac{8}{12}$ $\frac{8}{12} > \frac{3}{12}$, so $\frac{2}{3} > \frac{1}{4}$

**Compare each set of fractions:**
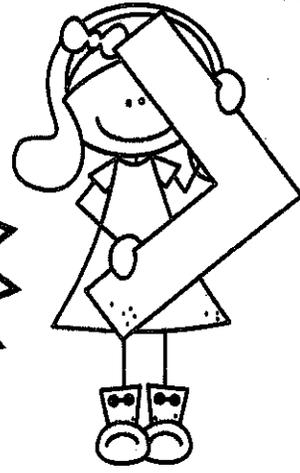
$\frac{2}{5}$ ◯ $\frac{5}{8}$

$\frac{2}{3}$ ◯ $\frac{4}{6}$

$\frac{5}{8}$ ◯ $\frac{3}{4}$

$\frac{3}{10}$ ◯ $\frac{2}{3}$

$\frac{3}{5}$ ◯ $\frac{4}{8}$
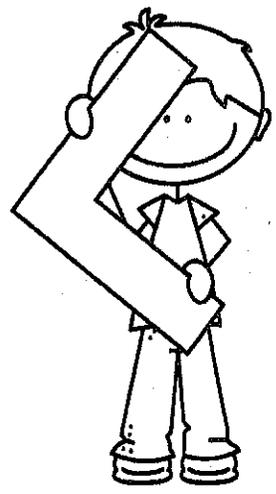
$\frac{1}{2}$ ◯ $\frac{4}{8}$

Use the different strategies from the previous page.

Arkansas Colleges...

Insert pictures or symbols of two state colleges. Give the
name and location of each.
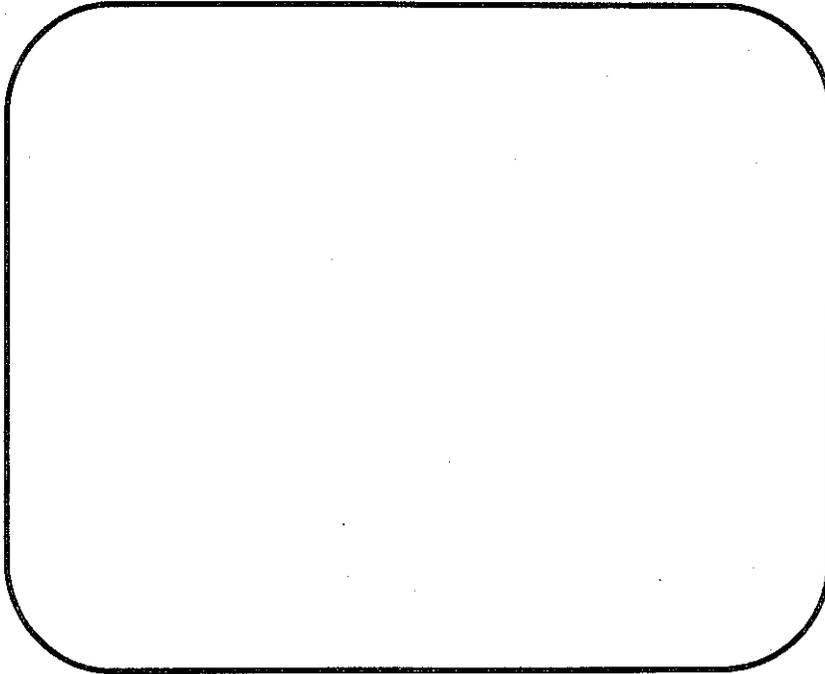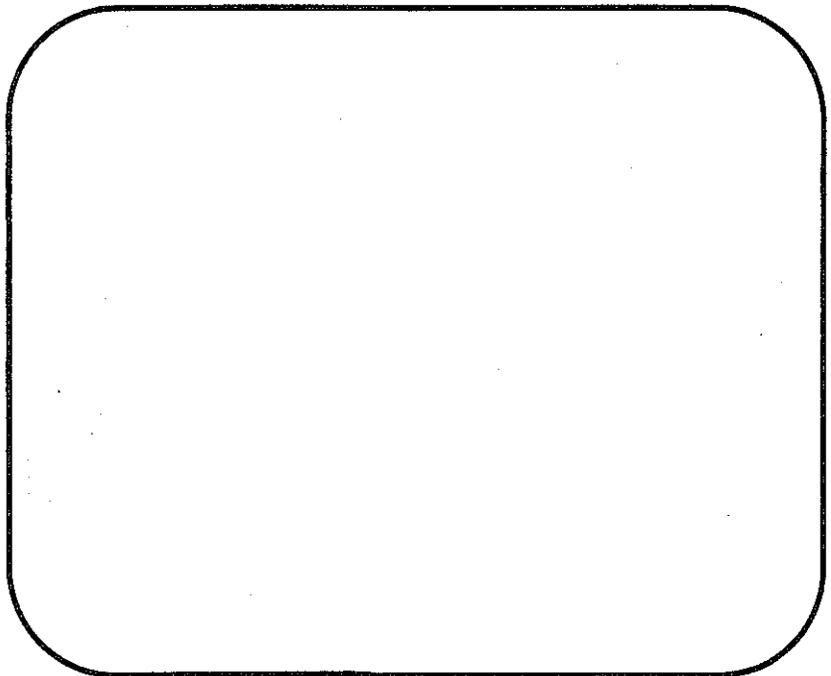
State Colleges... Part 2

Insert pictures or symbols of two more state colleges. Give the name and location of each.
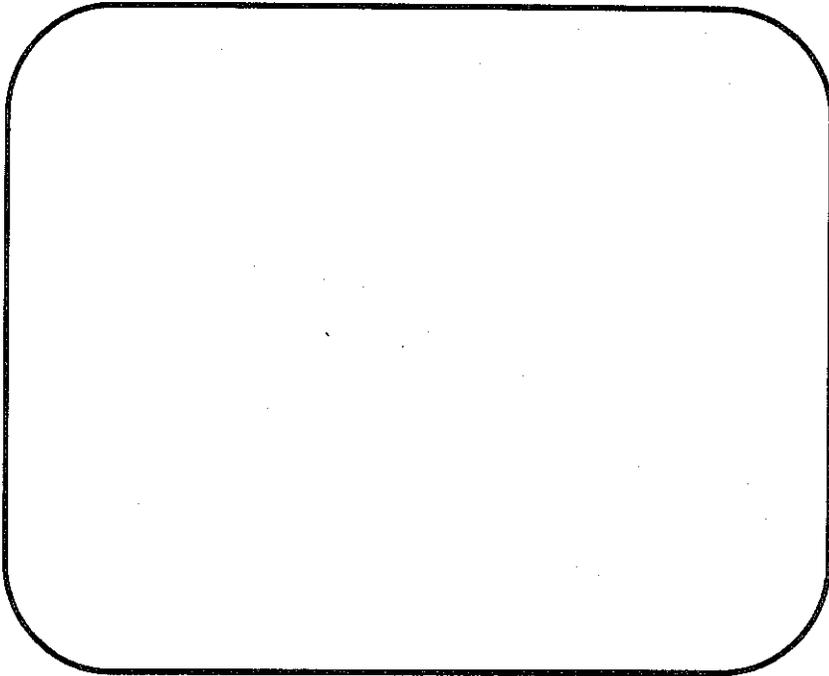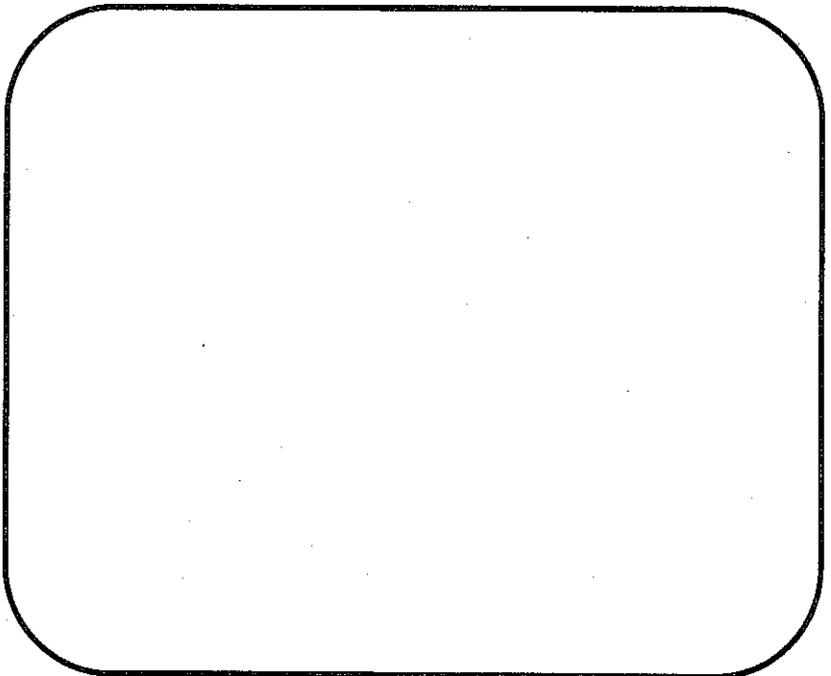
4.NF.3 ▸ **Decomposing Fractions**

I can decompose a fraction into the sum of fractions with the same denominator.

To <u>decompose</u> a fraction, break the fraction into smaller fractions with the same denominator.
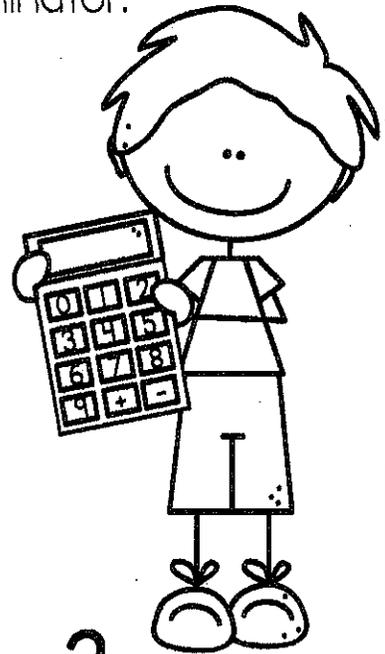
$\frac{4}{6} + \frac{1}{6}$

$\frac{3}{6} + \frac{2}{6}$
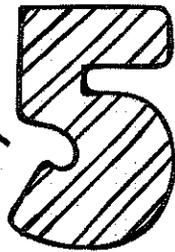
$\frac{2}{6} + \frac{2}{6} + -$

$\frac{3}{6} + - + -$
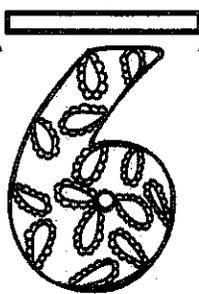
$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

## Find two ways to decompose each fraction.
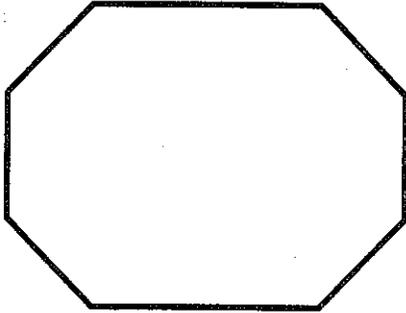
$$\frac{3}{4}$$
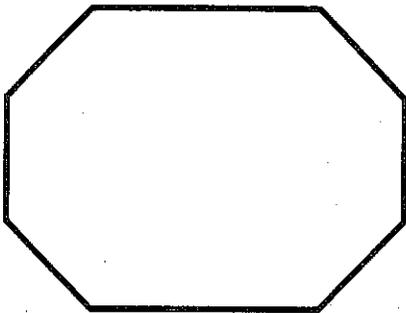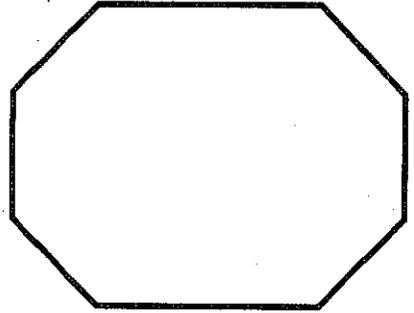
$$\frac{4}{5}$$
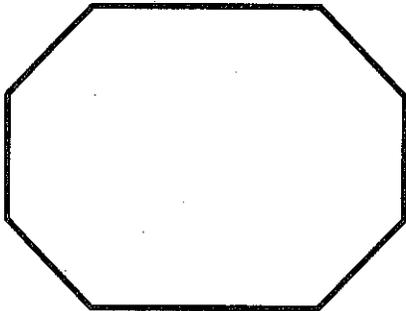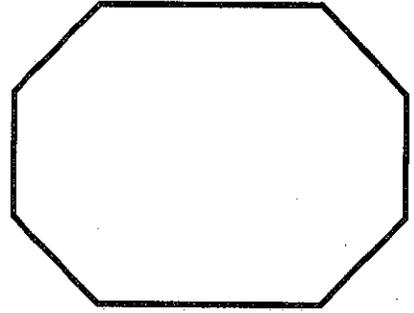
$$\frac{7}{8}$$
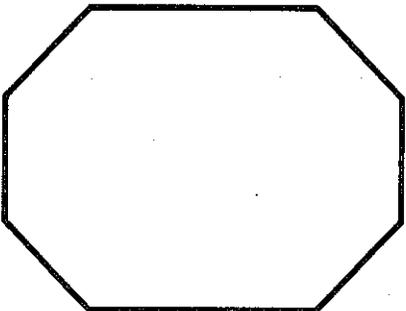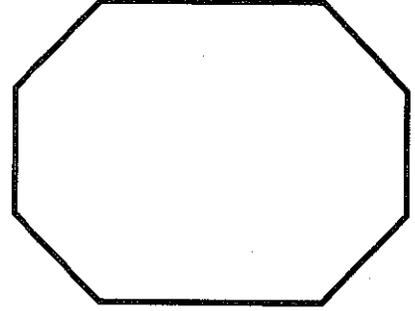
$$\frac{7}{10}$$
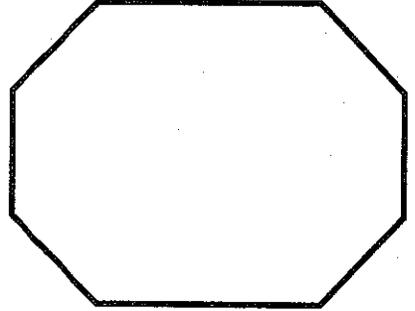
My Geography
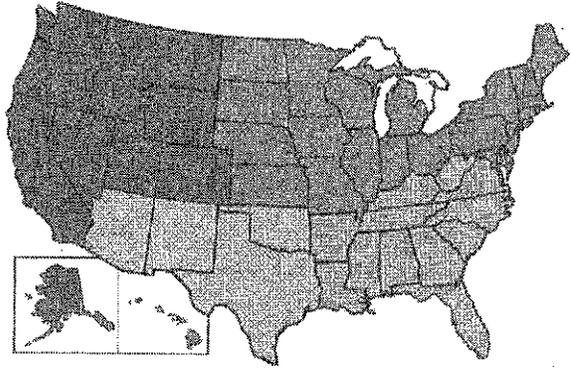
My County is:

_____

My Street is:

_____

There are _____ counties in my state.

My Zip Code is:

_____

The counties that surround my county are:

My City is:

_____

_____

_____

_____

State Geography

Draw the outline of your state and then label all of the major cites.

4.NF.3 Adding & Subtracting Fractions

I can understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

Shade 3 parts with one color and 2 parts with another. How many total parts are shaded?
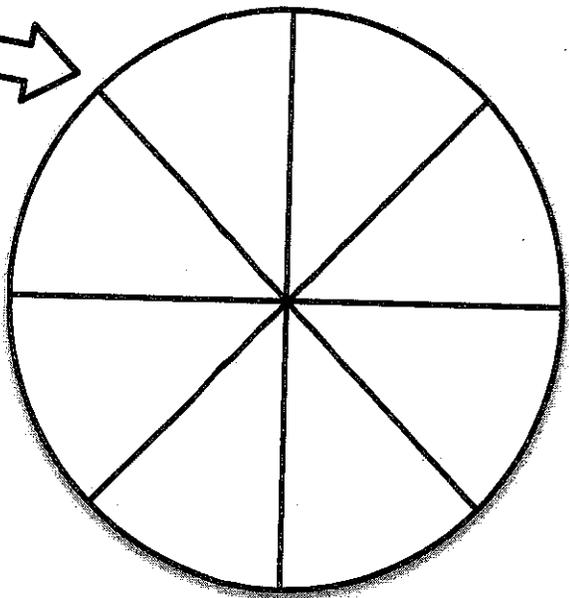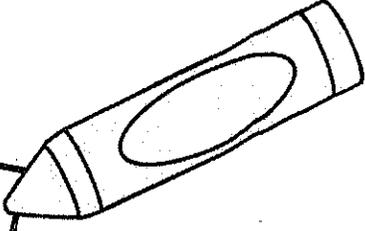
$$\frac{3}{8} + \frac{2}{8} = \frac{}{}$$
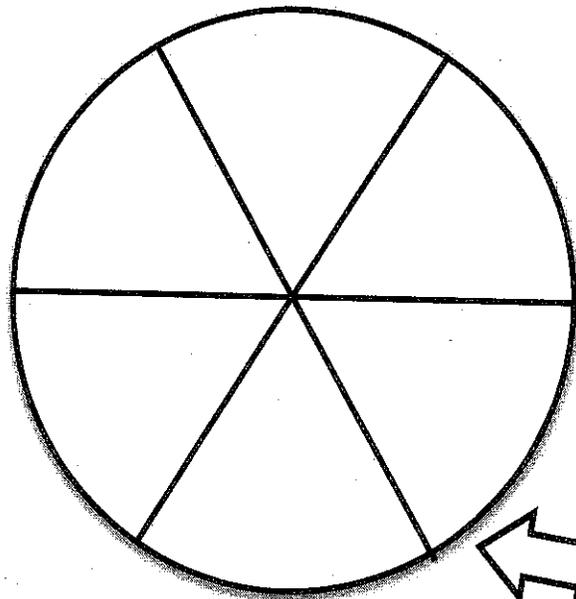
$$\frac{4}{6} - \frac{3}{6} = \frac{}{}$$

Shade 4 parts then X out 3 of the shaded parts. How many parts are left shaded?
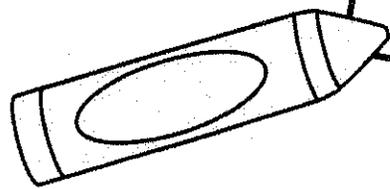
$$\frac{5}{8} + \frac{2}{8} = \frac{}{}$$
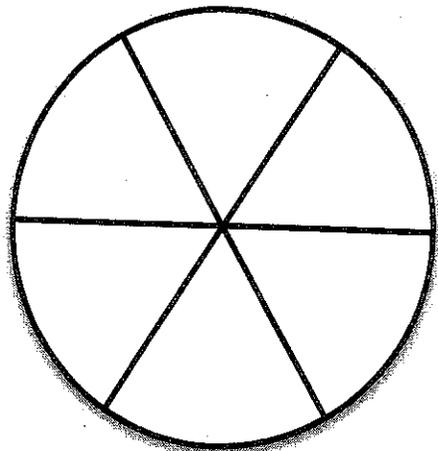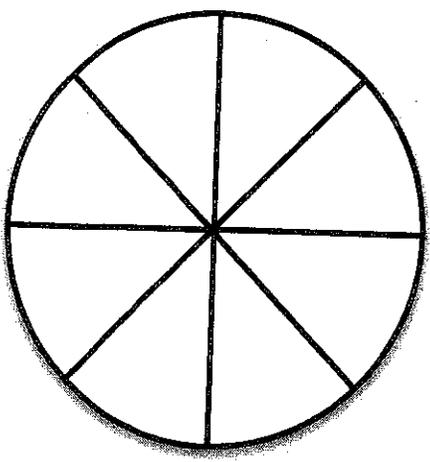
$$\frac{4}{6} + \frac{1}{6} = \frac{}{}$$

$$\frac{3}{8} - \frac{1}{8} = \frac{}{}$$
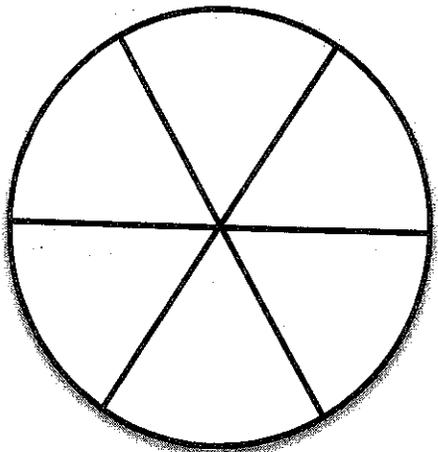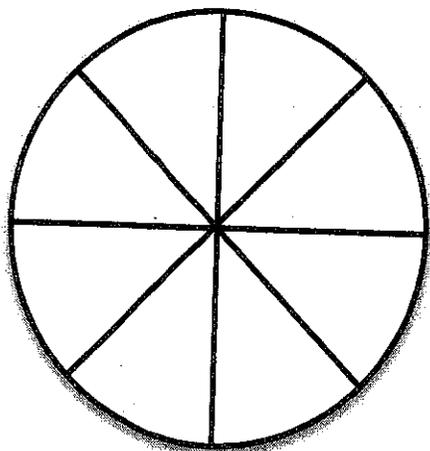
$$\frac{5}{6} - \frac{4}{6} = \frac{}{}$$

Largest City

_____
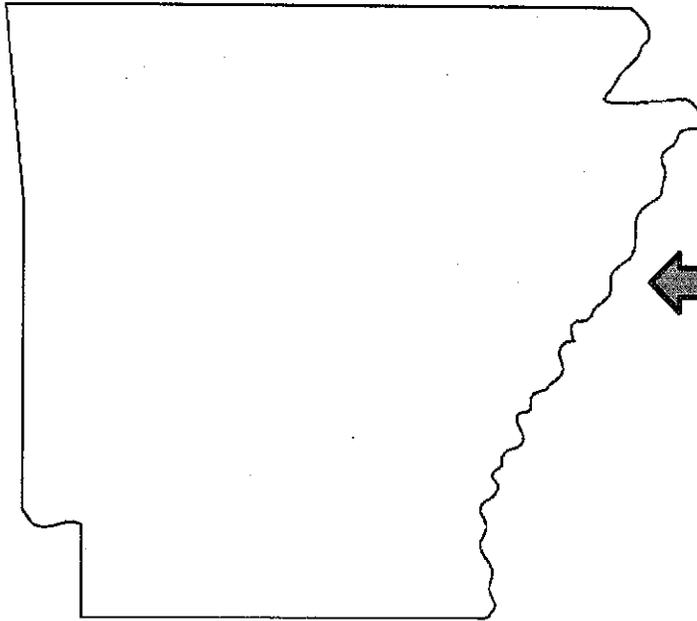
Mark and label the
location of the
largest city.

The population of the largest
city is _____ .

The largest city was founded by...

_____

_____

_____

_____

State Capital

_____

Some exciting things to see and do in the state capital are...

_____

_____

_____

_____

_____

_____

_____

History about the state capital:

_____

_____

_____

_____

_____

Draw or cut and paste a picture of something that relates to your capital.