1.0A Fact Families

Task

Materials

- Fact Family work sheets
- Blank addition and subtraction frames (2 of each)
- Numbers cards in fact-family sets

Actions

As a whole class, the teacher presents students with 3 numbers on cards, such as 5, 8, and 3. The teacher asks the students to find all the ways the numbers can be put together in addition or subtraction sentences. The teacher will provide a set of frames, preferably on sentence strips in a pocket chart:

___ + ___ = ___

___ + ___ = ___

___ - ___ = ___

___ - ___ = ___

As the students determine the first equation, the teacher places the corresponding numbers in the pockets of the chart to represent it. Then the teacher points to the second addition sentence frame and asks,

Is there another addition equation we can write using these three numbers?

Once the students name the equation, the teacher then takes out another set of the
same number cards and place them in the appropriate spots in the second equation.

The teacher then points out that the next equation is subtraction and asks the students to find a subtraction equation using the same three numbers. Both subtraction equations need to be determined, with the corresponding numbers placed in the pocket chart. When completed, the frames should look like this:

\[5 + 3 = 8\]
\[3 + 5 = 8\]
\[8 - 5 = 3\]
\[8 - 3 = 5\]

The students can chant in unison the 4 equations so they can both see and say them. Particularly at the beginning of first grade some students may confuse the +, -, and = symbols.

Then, in partners, students are given sets of 3 related numbers (see examples on the worksheet) and asked to find two addition and two subtraction equations with the same three numbers.

Once students are familiar with the objective, they are given the first worksheet. This practice can be given to individuals or partners to complete, or can be completed by the entire class together using a document projector with students coming up to write their equations.