Family Reunion

The Maxwells are having a family reunion today! The Maxwells are a big family, and great-grandma Maxwell is having trouble keeping track of all of her great-grandchildren. Help great-grandma Maxwell organize her family tree using a relation.

Great-grandma Maxwell wants to organize her family members into ordered pairs.

An ordered pair is a collection of two objects that are grouped together because of a relation. We write ordered pairs as 🡺 (object 1, object 2).

The relation great-grandma Maxwell wants to use in order to organize her family is:

(parent, child)

1. Instructions: Using the Family Tree worksheet, collect all of the ordered pairs of parents and their children for great-grandma Maxwell.

2. What if the relation was different? What would the ordered pairs be if the relation were:

(grandparent, grandchild)?

3. We use relations in math. We often have ordered pairs that have numbers. The following is another way to represent a relation:

|  |  |
| --- | --- |
| x | y |
| 2 | 7 |
| 3 | 8 |
| 4 | 10 |
| 5 | 13 |

If the relation for the ordered pairs is (x , y), write out the ordered pairs represented in the table.

4. The domain of a relation is the first set of numbers in the ordered pair. The range is the second set of numbers in the coordinate pair.

For example, in Great-grandma Maxwell’s relation, the domain was everybody who was a parent, and the range was everybody who was someone’s child.

a. What numbers are in the domain of the relation shown in the table above?

b. What numbers are in the range of the relation shown in the table above?