## Possible Solutions

Brittany needs no more than 16 pounds of ground meat to make burgers for a picnic. At the store, she buys 4 packages of ground meat. The amount that each package can weigh is shown with the inequality below.

$$
4 x \leq 16
$$

Create a number line that represents this inequality and the possible weights of the packages of ground meat.

- Since Brittany wants no more than 16 pounds of ground meat, this is the highest yield for the total weight. This means that 16 is included in the result. For this inequality, a number line needs to be created.
- First, determine the maximum amount each package could weigh. This can be calculated by changing the $\leq$ to an = and solving.
- $4 x=16$ Solving for $x$ gives us 4 . The maximum weight of each package is 4 pounds.
- Next, create a number line that starts at the maximum point for $x$, in this case 4. Put a closed circle on that point and draw a line that keeps going to the smallest possible result (if applicable).

- In this case, the lowest possible amount is just before 0 , since it is impossible to have a negative weight in meat.

