

1. Mindy bought one pack of gum and chewed two pieces.

If the two pieces of gum were two fifths of Mindy's pack, how many total pieces of gum were in the pack? Explain your reasoning.

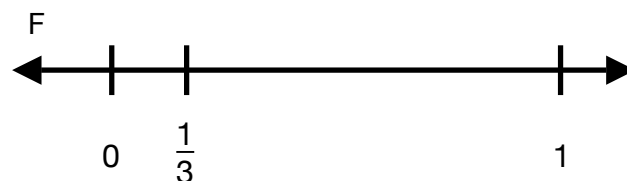
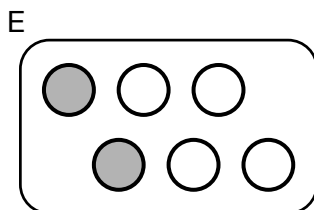
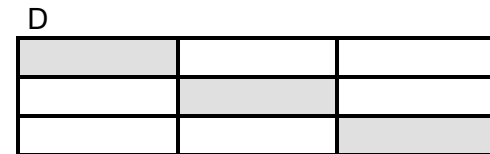
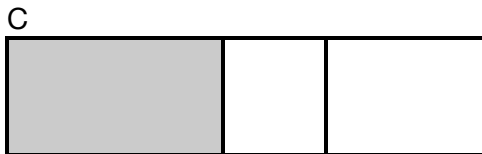
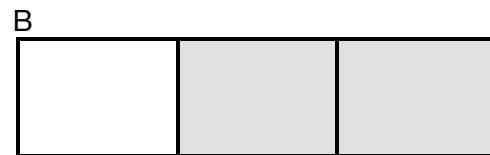
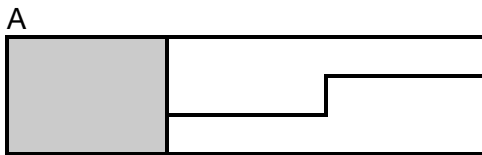
The denominator tells you the total number of equal parts in one package. If two pieces of gum is two-fifths of the package, there were five pieces of gum in the package.

If the two pieces of gum were one fourth of her pack, how many total pieces of gum were in the pack? Explain your reasoning.

The denominator tells you the number of equal parts in one package, so the gum is divided into four equal parts. If two pieces of gum equals one part, then four pieces equals two parts, six pieces equals three parts, and eight pieces equals four parts or one whole package. There were eight pieces of gum in the full package.



2. Mr. Jones asked his students to draw a diagram to represent one third. Here are the diagrams his students drew. Which diagrams do **not** show one third? Explain your reasoning.



In order to represent thirds, you must have three equal-sized parts. The parts do not need to be the same shape, but must be the same size.

Diagram A does represent one third because there are three equal-sized parts and one part is shaded.

Diagram B does represent one third because there are three equal-sized parts and one part is not shaded.

Diagram C does not represent one third because the three regions are not the same size.

Diagram D does represent one third because there are nine equal-sized parts and three are shaded, which is three ninths. Three ninths is equal to one third.

Diagram E represents one third because there are six equal-sized parts and two are shaded. Two sixths is equal to one third.

Diagram F does not represent one third because the distance between 0 and 1 is not divided into three equal-sized parts.

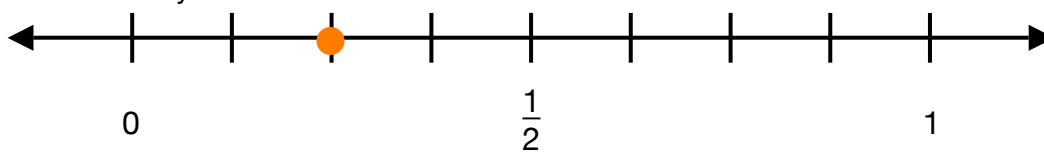
3. The Burger Place has the *Monster Burger* and the *Light Burger* on their menu. One is made with one-fifth pound of beef and the other is made with one-third pound of beef. Which is the *Monster Burger*? Explain your answer.

$\frac{1}{3}$ pound

$\frac{1}{5}$ pound

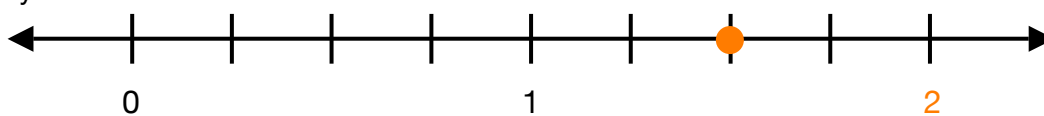
The *Monster Burger* is the larger burger, so it is made with one-third pound of beef. If you divide one pound of hamburger into three equal-sized parts, each part is larger than if you divide one pound of hamburger into five equal-sized parts. The more parts you divide a unit into, the smaller each part.

4. Use a dot to show the location of one fourth on the number line below. Explain how you determined your answer.



The distance between 0 and 1 is divided into eight equal intervals, or eighths. Two eighths is the same as one fourth.

5. Use a dot to show the location of $1\frac{1}{2}$ on the number line below. Explain how you determined your answer.



The distance between 0 and 1 is divided into four equal intervals, or fourths. Four intervals to the right of 1 represents 2. Halfway between 1 and 2 is $1\frac{1}{2}$.