Find the Whole
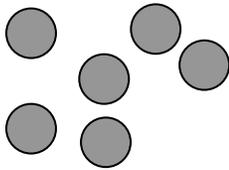
1. What would the whole look like if the red trapezoid is:

   a) one third?

   b) three fourths?

   c) three halves?

2. What would the whole set look like if 6 counters are:

   a) one half of the set?

   b) two thirds of a set?

   c) three halves of a set?
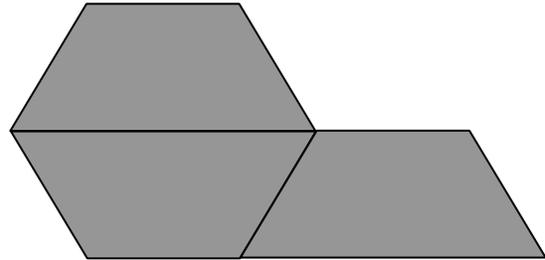
3. What would the whole look like if the purple Cuisenaire® Rod is:

   a) one half?

   b) two thirds?

   c) four thirds?

Solutions for Find the Whole

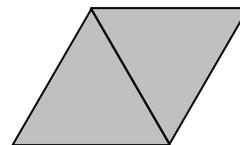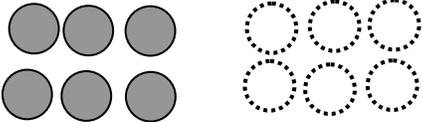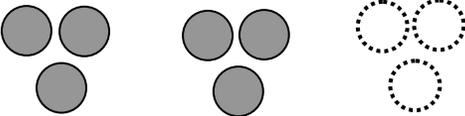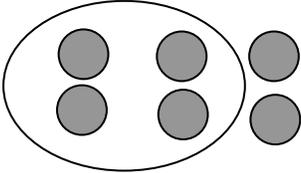|	
1a) If the red trapezoid is one third, then three red trapezoids would be the whole.	One red trapezoid is one third. The whole (three thirds) could be composed of 3 red trapezoids (arranged in any configuration), or any combination of pattern blocks that has the same area (e.g., a yellow hexagon and a red trapezoid).
1b) If the red trapezoid is three fourths, then a red trapezoid and a green triangle would be the whole.	One red trapezoid is three fourths. A third of a red trapezoid (e.g., a green triangle) is one fourth. The whole (four fourths) could be composed of a red trapezoid and a green triangle (arranged in any configuration), or any combination of pattern blocks that has the same area (e.g., 4 green triangles).
1c) If the red trapezoid is three halves, then two green triangles or a blue rhombus would be the whole.	One red trapezoid is three halves. A third of a red trapezoid (e.g., a green triangle) is one half. The whole (two halves) could be composed of 2 green triangles or a blue rhombus.

2a) If 6 counters are one half of the set, then 12 counters are the whole set.	 If 6 counters are one half of the set, then the whole set (two halves) would be composed of 12 counters.
2b) If 6 counters are two thirds of the set, then 9 counters are the whole set.	 If 6 counters are two thirds of the set, then 3 counters are one third. The whole set (three thirds) would be composed of 9 counters.
2c) If 6 counters are three halves of the set, then 4 counters are the whole set.	 If 6 counters are three halves of the set, then 2 counters are one half. The whole set (two halves) would be composed of 4 counters.

Solutions for Find the Whole (continued)

3a) If the purple rod is one half, then the brown rod is the whole.	**2 purple rods** **1 brown rod** If the purple rod is one half, then 2 purple rods (two halves) would be the whole. The brown rod has the same length as 2 purple rods.
3b) If the purple rod is two thirds, then the dark green rod is the whole.	**1 purple rod** **3 red rods** **1 green rod** If the purple rod is two thirds, then half of the purple rod (the red rod) is one third. The dark green rod has the same length as 3 red rods (three thirds).
3c) If the purple rod is four thirds, then the light green rod is the whole.	**1 purple rod** **3 white rods** **1 light green rod** If the purple rod is four thirds, then a fourth of the purple rod (the white rod) is one third. The dark green rod has the same length as 3 white rods (three thirds).