Problem Solving • Find a Rule

Samantha is making a scarf with fringe around it. Each section of fringe is made of 4 pieces of yarn with 2 beads holding them together. There are 42 sections of fringe on Samantha's scarf. How many wooden beads and how many pieces of yarn are on Samantha's scarf?

Read the Problem	Solve the Problem
What do I need to find? Possible answer: I need to find the number of beads and the number of pieces of yarn on Samantha's scarf.	(table below)

Sections of Fringe	1	2	3	4	6	42
Number of Beads	2	4	6	8	12	84
Pieces of Yarn	4	8	12	16	24	168

What information do I need to use?
Possible answer: I need to use the number of sections on the scarf, and that each section has 4 pieces of yarn and 2 beads.

How will I use the information?
I will use the information to search for patterns to solve a simpler problem.

Possible answer: I can multiply the number of sections by 2 to find the number of beads. Then, I can multiply the number of sections by 4, or the number of beads by 2, to find the number of pieces of yarn. So, Samantha's scarf has 2 × 42, or 84 beads, and 4 × 42, or 168 pieces of yarn.

1. A rectangular tile has a decorative pattern of 3 equal-sized squares, each of which is divided into 2 same-sized triangles. If Marnie uses 36 of these tiles on the wall behind her kitchen stove, how many triangles are displayed?

2. Leta is making strawberry-almond salad for a party. For every head of lettuce that she uses, she adds 5 ounces of almonds and 10 strawberries. If she uses 75 ounces of almonds, how many heads of lettuce and how many strawberries does Leta use?