

Problem Solving: Make a Table and Look for a Pattern

1. Find the next three numbers in each row. Write a formula to find any number in row B.

A	2	4	6			
B	2	8	14			

2. A company offers a 2% discount if you buy 1–5 of their products. If you buy 6–10 of their products, you earn a 3.5% discount. Buying 11–15 products will earn you a 5% discount. If the pattern continues, what discount would be offered for buying 33 products?

3. Explain the pattern. Draw the next eleven shapes.



4. In a contest, the first place team gets $\frac{1}{2}$ of the million-dollar prize. The second place team gets $\frac{1}{2}$ of the remaining money. Each team after that gets $\frac{1}{2}$ of the remaining money. How much will the sixth place team get?

5. An advertising sign lights up for 5 seconds then goes out for 2 seconds. For how many seconds will the sign be off in the first minute after the sign is turned on?

A 46 seconds **B** 30 seconds **C** 16 seconds **D** 2 seconds

6. **Writing to Explain** Explain your thinking as you find how many triangles would be in the 8th row of the pattern

