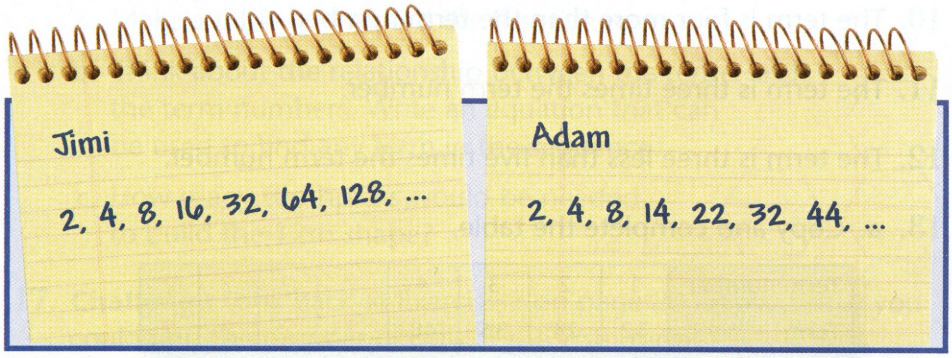
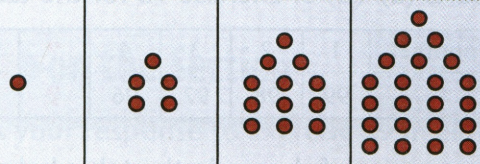
8. Jimi and Adam both extended the sequence 2, 4, 8, ... Did they both extend the sequence correctly? Explain.

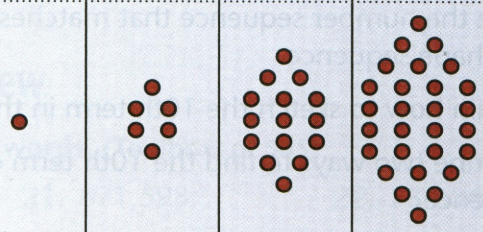


9. **Challenge**

a. The following table contains the first four pentagonal numbers. What are the 5th and 6th pentagonal numbers?

Term number		1	2	3	4	5	6
Term	Shape sequence					?	?
	Number sequence	1	5	12	22	?	?

b. The following table contains the first four hexagonal numbers. What are the 5th and 6th hexagonal numbers?

Term number		1	2	3	4	5	6
Term	Shape sequence					?	?
	Number sequence	1	6	15	28	?	?

c. How is the shape for each hexagonal number related to the shape for the corresponding pentagonal number?