

15A Make conjectures from patterns or sets of examples and nonexamples

1. What will be the *seventh* term in this pattern?

$$2a, 3a^2, 4a^4, 5a^8, \dots$$

- A $8a^{64}$
- B $8a^{32}$
- C $7a^{64}$
- D $7a^{32}$

2. What will be the *tenth* term in this sequence?

$$1, 2, 5, 6, 9, 10, 13, \dots$$

- A 14
- B 17
- C 18
- D 21

3. Nelda is making several figures out of square tiles as shown below.

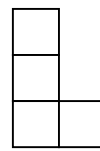


Figure 1

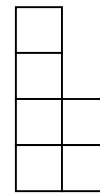


Figure 2

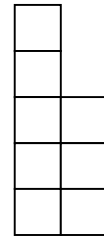


Figure 3

How many tiles will be required for the *fifth* figure?

- A 10
 - B 12
 - C 14
 - D 16
4. The height of a certain fungus doubles every day. If it is 4 mm tall on day 1, how tall will it be on day 4?
- A 8 mm
 - B 16 mm
 - C 32 mm
 - D 64 mm

