Topic: Multiples

Question: Which list contains only multiples of the number 7?

Answer choices:

A 3, 6, 9, 12

B 7, 14, 21, 28

C 36, 43, 50, 64

D 78, 85, 92, 99

Solution: B

We can see that all four of the numbers given in answer choice B are multiples of 7.

$$7 \cdot 1 = 7$$

$$7 \cdot 2 = 14$$

$$7 \cdot 3 = 21$$

$$7 \cdot 4 = 28$$

Topic: Multiples

Question: Choose the number that's a multiple of both 4 and 8.

Answer choices:

A 2

B 4

C 1

D 8

Solution: D

Notice that 8 is a multiple of 4, because $4 \cdot 2 = 8$, but 4 isn't a multiple of 8. Also, 8 is a multiple of 8, because $8 \cdot 1 = 8$. Furthermore, neither 1 nor 2 is a multiple of 4 or a multiple of 8. So D is the correct answer choice.

Topic: Multiples

Question: Choose the common multiple of 6 and 18.

Answer choices:

A 6

B 2

C 12

D 18

Solution: D

The first few multiples of 6 are

$$6 \cdot 1 = 6$$

$$6 \cdot 2 = 12$$

$$6 \cdot 3 = 18$$

$$6 \cdot 4 = 24$$

The first few multiples of 18 are

$$18 \cdot 1 = 18$$

$$18 \cdot 2 = 36$$

$$18 \cdot 3 = 54$$

$$18 \cdot 4 = 72$$

These lists have 18 in common, and 18 is one of the answer choices, so D is the correct answer choice.