

NAME: _____

A.A.30: Find the complement of a subset of a given set, within a given universe.

1. 060818ia, P.I. A.A.30

Consider the set of integers greater than -2 and less than 6. A subset of this set is the positive factors of 5. What is the complement of this subset?

- [A] $\{0, 2, 3, 4\}$
[B] $\{-2, -1, 0, 1, 2, 3, 4, 5, 6\}$
[C] $\{-1, 0, 2, 3, 4\}$
[D] $\{-2, -1, 0, 2, 3, 4, 6\}$

2. 080912ia, P.I. A.A.30

Given:

$A = \{\text{All even integers from 2 to 20, inclusive}\}$

$B = \{10, 12, 14, 16, 18\}$

What is the complement of set B within the universe of set A ?

- [A] $\{4, 6, 8\}$ [B] $\{2, 4, 6, 8\}$
[C] $\{2, 4, 6, 8, 20\}$ [D] $\{4, 6, 8, 20\}$

3. 080833ia, P.I. A.A.30

Twelve players make up a high school basketball team. The team jerseys are numbered 1 through 12. The players wearing the jerseys numbered 3, 6, 7, 8, and 11 are the only players who start a game. Using set notation, list the complement of this subset.

A.A.30: Find the complement of a subset of a given set, within a given universe.

[1] C _____

[2] C _____

[2] $\{1, 2, 4, 5, 9, 10, 12\}$ or $\{x|x = 1, 2, 4, 5, 9, 10, 12\}$

[1] 1, 2, 4, 5, 9, 10, 12, but set notation is not used.

or [1] Set notation is used and at least five correct numbers (but not the entire set) are written.

[0] Set notation is used, but fewer than five correct numbers are written.

or [0] $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$

or [0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an

[3] obviously incorrect procedure. _____