NAME:_____

1. fall0704ia, P.I. A.A.29
Which interval notation represents the set of all numbers from 2 through 7, inclusive?

[A] [2,7) [B] (2,7] [C] (2,7) [D] [2,7]

2. 010917ia, P.I. A.A.29
The set {1,2,3,4} is equivalent to

[A] $\{x \mid 0 < x < 4,$ where x is a whole number$\}$

[B] $\{x \mid 1 < x < 4,$ where x is a whole number$\}$

[C] $\{x \mid 0 < x \leq 4,$ where x is a whole number$\}$

[D] $\{x \mid 1 < x \leq 4,$ where x is a whole number$\}$

3. 060930ia, P.I. A.A.29
The set {11,12} is equivalent to

[A] $\{x \mid 11 < x \leq 12,$ where x is an integer$\}$

[B] $\{x \mid 10 < x \leq 12,$ where x is an integer$\}$

[C] $\{x \mid 10 \leq x < 12,$ where x is an integer$\}$

[D] $\{x \mid 11 < x < 12,$ where x is an integer$\}$

4. 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.

5. 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] {-2, -1, 0, 1, 2, 3, 4, 5, 6}

[B] {-2, -1, 0, 2, 3, 4, 6}

[C] {-1, 0, 2, 3, 4} [D] {0, 2, 3, 4}

6. 080912ia, P.I. A.A.30
Given:
A={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] {2,4,6,8} [B] {2,4,6,8,20}

[C] {4,6,8} [D] {4,6,8,20}

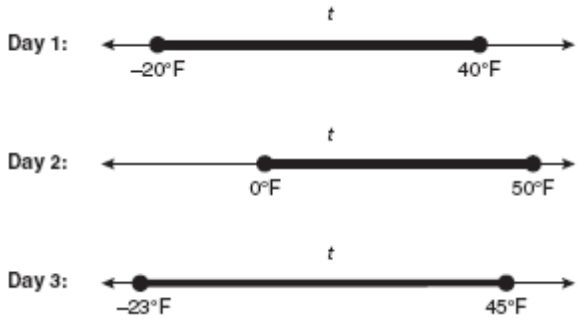
7. fall0710ia, P.I. A.A.31
Given:
Set $A = \{(-2,-1),(-1,0),(1,8)\}$
Set $B = \{(-3,-4),(-2,-1),(-1,2),(1,8)\}$.
What is the intersection of sets A and B?

[A] $\{(-2,-1),(1,8)\}$ [B] $\{(-2,-1)\}$

[C] $\{(-3,-4),(-2,-1),(-1,2),(-1,0),(1,8)\}$

[D] $\{(1,8)\}$

8. 060833ia, P.I. A.A.31
Maureen tracks the range of outdoor temperatures over three days. She records the following information.



Express the intersection of the three sets as an inequality in terms of temperature, t.

[1] D

[2] C

[3] B

[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
[4] obviously incorrect procedure.

[5] C

[6] B

[7] A

[2] $0 \le t \le 40$ or an equivalent answer.
[1] Appropriate work is shown, but one conceptual error is made, such as $0 < t < 40$ or $-23 \le t \le 50$.
[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously
[8] incorrect procedure.