

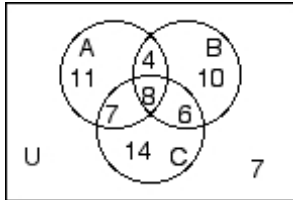
Name \_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Find the cardinal number of the set.

- 1) The numbers in the Venn Diagram below represent cardinalities.

1) \_\_\_\_\_



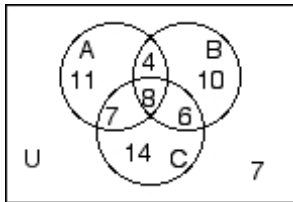
Find  $n(B \cup C)$

- A) 14                      B) 60                      C) 49                      D) 42
- 2)  $\{x \mid x \text{ is an even integer number smaller than } 100\}$
- A)  $\aleph_0$                       B) 99                      C) 49                      D)  $\aleph_0$

2) \_\_\_\_\_

- 3) The numbers in the Venn Diagram below represent cardinalities.

3) \_\_\_\_\_



Find  $n(A \cap B' \cap C)$

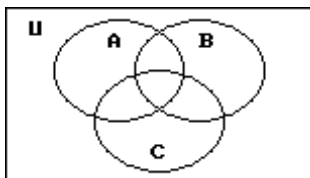
- A) 7                      B) 15                      C) 11                      D) 6
- 4)  $\{-4, -8, -12, -16, \dots\}$
- A)  $\aleph_0$                       B) 4                      C)  $\aleph_0$                       D) 100

4) \_\_\_\_\_

5) Given:

- $n(A) = 60$
- $n(B) = 68$
- $n(C) = 62$
- $n(A \cap B) = 12$
- $n(A \cap C) = 14$
- $n(B \cap C) = 8$
- $n(A \cap B \cap C) = 6$
- $n(A' \cap B' \cap C) = 121$

Find  $n(U)$



- A) 293                      B) 222                      C) 283                      D) 162

5) \_\_\_\_\_

6) {The set of points on a straight line}

- A)  $\aleph_0$                       B) 0                      C) 1                      D) c

6) \_\_\_\_\_

7) {Monday, Tuesday, ..., Saturday}

- A) 7                      B) 3                      C) 4                      D) 6

7) \_\_\_\_\_

Determine whether the sets are equal, equivalent, both, or neither.

8)  $\{x \mid x \text{ is an even integer}\}$  and  $\{x \mid x \text{ is an odd integer}\}$

- A) Both                      B) Neither                      C) Equivalent                      D) Equal

8) \_\_\_\_\_

9)  $\{4, 13\}$  and  $\{4, 1, 3\}$

- A) Both                      B) Equal                      C) Equivalent                      D) Neither

9) \_\_\_\_\_

10) {brake} and {break}

- A) Neither                      B) Both                      C) Equal                      D) Equivalent

10) \_\_\_\_\_

11)  $\{34, 45, 63\}$  and  $\{45, 63, 34\}$

- A) Both                      B) Equal                      C) Equivalent                      D) Neither

11) \_\_\_\_\_

12)  $\{3, 14\}$  and  $\{31, 4\}$

- A) Neither                      B) Both                      C) Equal                      D) Equivalent

12) \_\_\_\_\_

Find the indicated cardinal number.

13) Find  $n(A)$  given that  $n(A \times B) = 108$  and  $n(B) = 9$ .

- A) 12                      B) 117                      C) 9                      D) 99

13) \_\_\_\_\_

- 14) Find  $n(F)$ , given that  $n(B \times F) = 18$  and  $B = \{1, 3\}$ . 14) \_\_\_\_\_  
 A) 54                                      B) 6                                      C) 9                                      D) 36
- 15) Find  $n(E)$ , given that  $n(C \times E) = 18$  and  $C = \{4, 5, 6\}$ . 15) \_\_\_\_\_  
 A) 54                                      B) 9                                      C) 6                                      D) 3
- 16) Find  $n(C \times D)$  given that  $C = \{4, 5, 6\}$  and  $D = \{7, 8, 9, 10\}$ . 16) \_\_\_\_\_  
 A) 12                                      B) 7                                      C) 27                                      D) 81

The lists below show five agricultural crops in Alabama, Arkansas, and Louisiana.

<u>Alabama</u>	<u>Arkansas</u>	<u>Louisiana</u>
soybeans (s)	soybeans (s)	soybeans (s)
peanuts (p)	rice (r)	sugarcane (n)
corn (c)	cotton (t)	rice (r)
hay (h)	hay (h)	corn (c)
wheat (w)	wheat (w)	cotton (t)

Let  $U$  be the smallest possible universal set that includes all of the crops listed, and let  $A$ ,  $K$  and  $L$  be the sets of five crops in Alabama, Arkansas, and Louisiana, respectively. Find each of the following sets.

- 17)  $L' \cap A$  17) \_\_\_\_\_  
 A) {c, s}                                      B) {h, n, t, w}                                      C) {n, r, t}                                      D) {h, p, w}
- 18) The set of crops in  $U$ . 18) \_\_\_\_\_  
 A) {s, p, c, h, w, s, r, t, h, w, s, n, r, c, t}  
 B) {c, h, n, p, r, s, t, w}  
 C) {s, p, c, h, w, r, t, n, c}  
 D) {s, p, c, w, r, t, n}
- 19) The set of crops common to  $A$ ,  $K$ , and  $L$  19) \_\_\_\_\_  
 A) {n, p, s}                                      B) {c, h, n, p, r, s, t, w}  
 C) {s}                                      D) {n, p}
- 20) The set of crops in  $A'$ . 20) \_\_\_\_\_  
 A) {c, h, n, r, s, t, w}                                      B) {r, t}  
 C) {h, n, r, t}                                      D) {n, r, t}
- 21)  $A \cap K$  21) \_\_\_\_\_  
 A) {h, s, w}                                      B) {c, p, r, t}  
 C) {c, h, p, r, s, t, w}                                      D) {c, h, s, t, w}

Decide whether or not it is possible to set up a one-to-one correspondence between the elements of the sets.

- 22)  $\{0, 5, 12, 17\}$  and  $\{5, 12, 17\}$  22) \_\_\_\_\_  
 A) Not possible                                      B) Possible

23)  $\{0\}$  and  $\{187\}$

A) Possible

B) Not possible

23) \_\_\_\_\_

24)  $\{0, 0.5, 0.25, 0.2\}$  and  $\left\{\frac{1}{2}, \frac{1}{4}, \frac{1}{5}\right\}$

A) Not possible

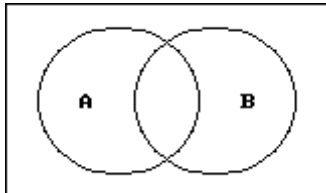
B) Possible

24) \_\_\_\_\_

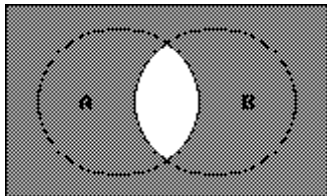
Shade the regions representing the set.

25)  $(A \cup B) \cap (A \cap B)'$

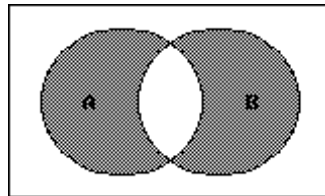
25) \_\_\_\_\_



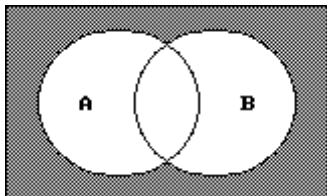
A)



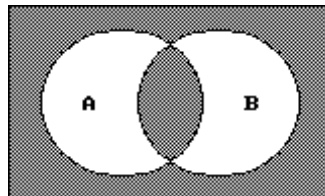
B)



C)



D)



Write true or false for the following statement.

Let  $A = \{3, 5, 7, 9, 11, 13\}$

$B = \{3, 5, 9, 11\}$

$C = \{5, 9, 13\}$

26)  $\{x \mid x \text{ is an odd counting number less than } 15\} = A$

A) True

B) False

26) \_\_\_\_\_

27)  $\{13\} \in B$

A) True

B) False

27) \_\_\_\_\_

A one-to-one correspondence between the set of counting numbers and the given set has been established. Find an expression for the  $n$ th term of the given set that corresponds to the counting number  $n$ .

28)

$\{-11, -22, -33, -44, \dots, \square, \dots\}$

$\begin{matrix} \updownarrow & \updownarrow & \updownarrow & \updownarrow & \updownarrow & \updownarrow \\ \{1, & 2, & 3, & 4, & \dots, & n, & \dots\} \end{matrix}$

A)  $-11n$

B)  $11n$

C)  $n + 11$

D)  $n - 11$

28) \_\_\_\_\_

- 29) 29) \_\_\_\_\_  
 $\{100, 200, 300, 400, \dots, \square, \dots\}$   
 $\begin{matrix} \updownarrow & \updownarrow & \updownarrow & \updownarrow & \updownarrow & \updownarrow \\ \{1, & 2, & 3, & 4, & \dots, & n, & \dots\} \end{matrix}$   
 A)  $100^n$                       B)  $100n$                       C)  $-100n$                       D)  $n^{100}$

- 30) 30) \_\_\_\_\_  
 $\{2, 5, 8, 11, \dots, \square, \dots\}$   
 $\begin{matrix} \updownarrow & \updownarrow & \updownarrow & \updownarrow & \updownarrow & \updownarrow \\ \{1, & 2, & 3, & 4, & \dots, & n, & \dots\} \end{matrix}$   
 A)  $3n - 1$                       B)  $3n$                       C)  $3n + 1$                       D)  $3n - 2$

Show that the set has cardinal number  $\aleph_0$  by establishing a one-to-one correspondence between the set of counting numbers and the given set. Be sure to show the pairing of the general terms in the sets.

- 31)  $\{4, 8, 12, 16, \dots\}$  31) \_\_\_\_\_
- |   |  |
|---|--|
| <p>A) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{4, 8, 12, 16, \dots, 4n, \dots\} \end{matrix}</math></p> <p>C) <math>\{0, 1, 2, 3, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{4, 8, 12, 16, \dots, 4n, \dots\} \end{matrix}</math></p> | <p>B) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{4, 8, 12, 16, \dots, n, \dots\} \end{matrix}</math></p> <p>D) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{4, 8, 12, 16, \dots, 5n, \dots\} \end{matrix}</math></p> |
|---|--|

- 32)  $\{3, 9, 27, 81, \dots\}$  32) \_\_\_\_\_
- |  |   |
|--|---|
| <p>A) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{3, 9, 27, 81, \dots, n^3, \dots\} \end{matrix}</math></p> <p>C) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{3, 9, 27, 81, \dots, 3n, \dots\} \end{matrix}</math></p> | <p>B) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{3, 9, 27, 81, \dots, 3^n, \dots\} \end{matrix}</math></p> <p>D) <math>\{1, 2, 3, 4, \dots, n, \dots\}</math><br/> <math>\begin{matrix} \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow &amp; \downarrow \\ \{3, 9, 27, 81, \dots, 32n, \dots\} \end{matrix}</math></p> |
|--|---|

Solve the problem.

- 33) A survey of 240 families showed that 33) \_\_\_\_\_  
 91 had a dog;  
 70 had a cat;  
 31 had a dog and a cat;  
 91 had neither a cat nor a dog nor a parakeet;  
 7 had a cat, a dog, and a parakeet.

How many had a parakeet only?

- A) 29                      B) 34                      C) 24                      D) 19
- 34) Mrs. Bollo's second grade class of thirty students conducted a pet ownership survey. Results of the survey indicate that 8 students own a cat, 15 students own a dog, and 5 students own both a cat and a dog. How many of the students surveyed own only a cat? 34) \_\_\_\_\_
- A) 8                      B) 18                      C) 3                      D) 15

- 35) Monticello residents were surveyed concerning their preferences for candidates Moore and Allen in an upcoming election. Of the 800 respondents, 300 support neither Moore nor Allen, 100 support both Moore and Allen, and 250 support only Moore. How many residents support Moore or Allen? 35) \_\_\_\_\_
- A) 300                      B) 100                      C) 400                      D) 500

- 36) A survey of 118 college students was done to find out what elective courses they were taking. Let A = the set of those taking art, B = the set of those taking basketweaving, and C = the set of those taking canoeing. The study revealed the following information. 36) \_\_\_\_\_
- $n(A) = 45$      $n(A \cap B) = 12$   
 $n(B) = 55$      $n(A \cap C) = 15$   
 $n(C) = 40$      $n(B \cap C) = 23$   
 $n(A \cap B \cap C) = 2$

How many students were not taking any of these electives?

- A) 10                      B) 28                      C) 36                      D) 26
- 37) A survey of a group of 116 tourists was taken in St. Louis. The survey showed the following: 37) \_\_\_\_\_
- 66 of the tourists plan to visit Gateway Arch;  
 50 plan to visit the zoo;  
 10 plan to visit the Art Museum and the zoo, but not the gateway Arch;  
 14 plan to visit the Art Museum and the Gateway Arch, but not the zoo;  
 18 plan to visit the Gateway Arch and the zoo, but not the Art Museum;  
 9 plan to visit the Art Museum, the zoo, and the Gateway Arch;  
 14 plan to visit none of the three places.

How many plan to visit the Art Museum only?

- A) 13                      B) 50                      C) 37                      D) 102

Use  $\subseteq$  or  $\not\subseteq$  in the blank to make a true statement.

- 38)  $\{6, 8, 10\}$  \_\_\_  $\{5, 6, 7, 8, 10\}$  38) \_\_\_\_\_
- A)  $\not\subseteq$                       B)  $\subseteq$

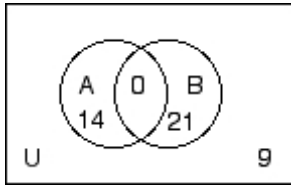
- 39)  $\{b, p, a\}$  \_\_\_  $\{b, b, p, p, a, a\}$  39) \_\_\_\_\_
- A)  $\not\subseteq$                       B)  $\subseteq$

Draw an appropriate Venn diagram and use the given information to fill in the number of elements in each region.

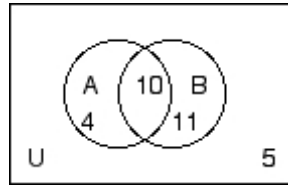
40)  $n(A) = 14, n(B) = 21, n(A \cup B) = 25, n(B') = 9$

40) \_\_\_\_\_

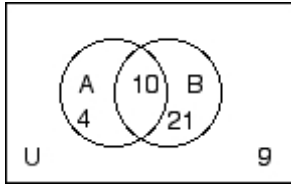
A)



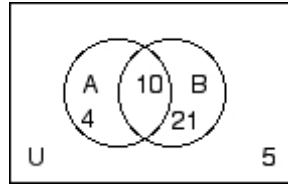
B)



C)



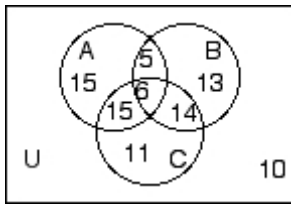
D)



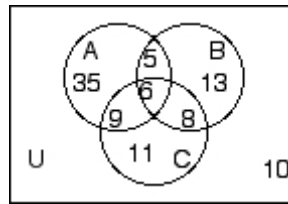
41)  $n(A) = 35, n(A \cap B') = 24, n(A \cap C) = 15, n(B \cap C) = 14, n(A' \cap B' \cap C') = 10, n(A \cap B \cap C) = 6, n(B \cup C) = 52, n(B \cap C') = 18$

41) \_\_\_\_\_

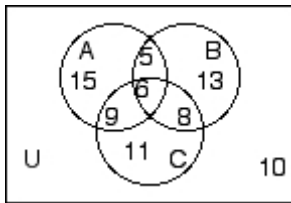
A)



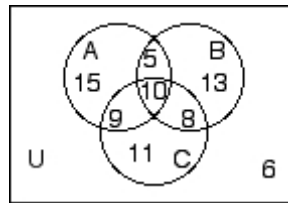
B)



C)



D)



Complete the blank with either  $\in$  or  $\notin$  to make the statement true.

42)  $\{3\} \_ \{4 - 3, 5 - 3, 6 - 3, 7 - 3\}$

42) \_\_\_\_\_

A)  $\in$

B)  $\notin$

43)  $a \_ \{A, B, C, \dots, Z\}$

43) \_\_\_\_\_

A)  $\notin$

B)  $\in$

Describe the conditions under which the statement is true.

44)  $A \cup B = A$

44) \_\_\_\_\_

A)  $B = \emptyset$

B)  $B \subseteq A$

C)  $A \subseteq B$

D) Always true

45)  $A \cap A' = A$

45) \_\_\_\_\_

A)  $A = U$

B)  $A \neq \emptyset$

C) Always true

D)  $A = \emptyset$

46)  $A \cap B' = A$  46) \_\_\_\_\_  
 A)  $A \cap B = \emptyset$  B) Always true C)  $B = \emptyset$  D)  $B \subseteq A$

47)  $A \cap B = A$  47) \_\_\_\_\_  
 A)  $B \subseteq A$  B)  $A \subseteq B$  C) Always true D)  $B = \emptyset$

Let A and B be sets with cardinal numbers,  $n(A) = a$  and  $n(B) = b$ , respectively. Decide whether the statement is true or false.

48) If  $B \subseteq A$ ,  $n(B) = n(A) - n(A - B)$ . 48) \_\_\_\_\_  
 A) True B) False

49)  $n(A \cup B) = n(A) - n(B)$  49) \_\_\_\_\_  
 A) True B) False

List the elements in the set.

50) The set of all positive integer powers of 3. 50) \_\_\_\_\_  
 A) {1, 8, 27, 64, 125, ...} B) {3, 9, 27, 81, 243, ...}  
 C) {1, 3, 9, 27, 81, 243, ...} D) {3, 6, 9, 12, 15, ...}

51)  $\{x \mid x \text{ is an even integer smaller than } 8\}$  51) \_\_\_\_\_  
 A) {..., -6, -4, -2, 0, 2, 4, 6} B) {..., -6, -4, -2, 2, 4, 6}  
 C) {2, 4, 6} D) {0, 2, 4, 6}

52)  $\{x \mid x \text{ is an integer between } 3 \text{ and } 7\}$  52) \_\_\_\_\_  
 A) {4, 5, 6, 7} B) {3, 4, 5, 6} C) {4, 5, 6} D) {3, 4, 5, 6, 7}

53) The set of all whole numbers greater than 3 and less than 7 53) \_\_\_\_\_  
 A) {3, 4, 5, 6} B) {4, 5, 6} C) {4, 5, 6, 7} D) {3, 4, 5, 6, 7}

List the elements in the set .

Let  $U = \{q, r, s, t, u, v, w, x, y, z\}$

$A = \{q, s, u, w, y\}$

$B = \{q, s, y, z\}$

$C = \{v, w, x, y, z\}$ .

54)  $C' \cup A'$  54) \_\_\_\_\_  
 A) {s, t} B) {q, r, s, t, u, v, x, z}  
 C) {w, y} D) {q, s, u, v, w, x, y, z}

55)  $A \cap B'$  55) \_\_\_\_\_  
 A) {t, v, x} B) {r, s, t, u, v, w, x, z}  
 C) {q, s, t, u, v, w, x, y} D) {u, w}



Write the set in set-builder notation.

56) The set of all cars owned by students

A)  $\{x \text{ is a student with a car}\}$

C)  $\{x \mid x \text{ is a student with a car}\}$

B)  $\{x \text{ is a car}\}$

D)  $\{x \mid x \text{ is a car owned by a student}\}$

56) \_\_\_\_\_

57)  $\{17, 18, 19, 20\}$

A)  $\{17, 18, 19, 20\}$

C)  $\{x \mid x \text{ is an integer between 16 and 21}\}$

B)  $\{x \mid x \text{ is an integer less than 21}\}$

D)  $\{x \mid x \text{ is an integer between 17 and 20}\}$

57) \_\_\_\_\_

58)  $\{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$

A)  $\{x \mid x \text{ is any integer greater than } -3\}$

C)  $\{x \mid x \text{ is an integer}\}$

B)  $\{x \mid x \text{ is a natural number}\}$

D)  $\{-3, -2, -1, 0, 1, 2, 3\}$

58) \_\_\_\_\_

Find the number of proper subsets of the set.

59)  $\{3, 4, 5\}$

A) 7

B) 2

C) 5

D) 6

59) \_\_\_\_\_

60)  $\{x \mid x \text{ is an even number between 15 and 29}\}$

A) 128

B) 64

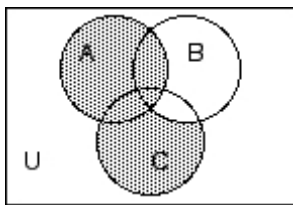
C) 28

D) 127

60) \_\_\_\_\_

Write a description of the shaded region using the symbols  $A, B, C, \cup, \cap, -$ , and  $'$  as needed.

61)



A)  $C \cap B' \cup A$

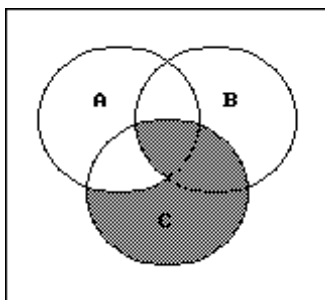
B)  $B' \cap A \cup C$

C)  $A \cup C$

D)  $A \cup C - B$

61) \_\_\_\_\_

62)



A)  $(A' \cup B) \cap C$

B)  $A' \cap C$

C)  $(A' \cap B) \cup C$

D)  $(A \cup B') \cap C$

62) \_\_\_\_\_

Decide whether  $\subseteq, \subset$ , both, or neither can be placed in the blank to make a true statement.

63)  $\{s, r, t\} \_ \{s, r, t\}$

A) Both  $\subseteq$  and  $\subset$

B) Neither

C)  $\subseteq$

D)  $\subset$

63) \_\_\_\_\_

64)  $\emptyset \_ \{3, 17, 30, 42\}$

A) Both  $\subset$  and  $\subseteq$

B)  $\subseteq$

C) Neither

D)  $\subset$

64) \_\_\_\_\_

Decide whether the given statement is always true or not always true.

65)  $(A \cap B) \subseteq B$

A) Not always true

B) Always true

65) \_\_\_\_\_

66)  $A - A' = A$

A) Always true

B) Not always true

66) \_\_\_\_\_

67)  $(A \cup B) \subseteq A$

A) Always true

B) Not always true

67) \_\_\_\_\_

Show that the set is infinite by placing it in a one-to-one correspondence with a proper subset of itself. Be sure to show the pairing of the general terms in the sets.

68)  $\left\{ \frac{4}{9}, \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \dots \right\}$

A)  $\left\{ \frac{4}{9}, \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \dots, \frac{n}{9}, \dots \right\}$

B)  $\left\{ \frac{4}{9}, \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \dots, \frac{n+4}{9}, \dots \right\}$

$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $\left\{ \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \frac{8}{9}, \dots, \frac{n+1}{9}, \dots \right\}$

$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $\left\{ \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \frac{8}{9}, \dots, \frac{n+5}{9}, \dots \right\}$

C)  $\left\{ \frac{4}{9}, \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \dots, \frac{n-4}{9}, \dots \right\}$

D)  $\left\{ \frac{4}{9}, \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \dots, \frac{n+3}{9}, \dots \right\}$

$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $\left\{ \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \frac{8}{9}, \dots, \frac{n-5}{9}, \dots \right\}$

$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow \quad \downarrow$   
 $\left\{ \frac{5}{9}, \frac{6}{9}, \frac{7}{9}, \frac{8}{9}, \dots, \frac{n+4}{9}, \dots \right\}$

68) \_\_\_\_\_

Find  $n(A)$  for the set.

69)  $A = \{2, 4, 6, 8, 10\}$

A)  $n(A) = 4$

B)  $n(A) = 10$

C)  $n(A) = 2$

D)  $n(A) = 5$

69) \_\_\_\_\_

70)  $A = \{x \mid x \text{ is a month in the year}\}$

A)  $n(A) = 12$

B)  $n(A) = 1$

C)  $n(A) = 24$

D)  $n(A) = 52$

70) \_\_\_\_\_

Let  $U = \{\text{all soda pops}\}$ ,  $A = \{\text{all diet soda pops}\}$ ,  $B = \{\text{all cola soda pops}\}$ ,  $C = \{\text{all soda pops in cans}\}$ , and  $D = \{\text{all caffeine-free soda pops}\}$ . Describe the set in words.

71)  $(A \cup D) \cap C'$

A) All diet, caffeine-free soda pops not in cans

B) All diet soda pops not in cans or all caffeine-free soda pops not in cans

C) All non-cola soda pops not in cans

D) All non-diet, non-caffeine-free soda pops not in cans

71) \_\_\_\_\_

Find the cardinal number of the indicated set. Use the cardinal number formula.

72) If  $n(A) = 16$ ,  $n(B) = 45$  and  $n(A \cup B) = 53$ , what is  $n(A \cap B)$ ?

72) \_\_\_\_\_

A) 8

B) 10

C) 24

D) 4

Determine whether the statement is true or false.

Let  $A = \{1, 3, 5, 7\}$

$B = \{5, 6, 7, 8\}$

$C = \{5, 8\}$

$D = \{2, 5, 8\}$

$U = \{1, 2, 3, 4, 5, 6, 7, 8\}$

73)  $\emptyset \subseteq A$

73) \_\_\_\_\_

A) True

B) False

Tell whether the statement is true or false.

74)  $\{x \mid x \text{ is a counting number greater than } 36\} = \{36, 37, 38, \dots\}$

74) \_\_\_\_\_

A) True

B) False

Determine whether or not the set is well defined.

75)  $\{x \mid x \text{ is a football team that has won the Super Bowl}\}$

75) \_\_\_\_\_

A) Well defined

B) Not well defined