

Orange: Sets

Name _____

1. Set $A = \{x \mid x \text{ is a factor of } 32\}$
Set $B = \{2, 4, 6, 8, 10\}$

(a) Find the intersection of A and B .

(b) Find the union of A and B .

2. If the universal set, $U = \{\text{January, February, March, April, May, June, July, August, September, October, November, December}\}$ and $A = \{\text{January, June, September, October}\}$, write the complement of A .

Name _____

1. Set $A = \{x \mid x \text{ is a factor of } 16\}$
Set $B = \{x \mid x \text{ is a factor of } 24\}$

(a) Find the intersection of A and B .

(b) Find the union of A and B .

2. If the universal set, $U = \{\text{Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday}\}$ and $A = \{\text{Saturday, Sunday}\}$, write the complement of A .

Name _____

1. Set $A = \{x \mid x \text{ is a factor of } 42\}$

Set $B = \{1, 3, 5, 7, 9\}$

(a) Find the intersection of A and B .

(b) Find the union of A and B .

2. If the universal set, $U = \{\text{apple, coconut, peach, blueberry, cherry, strawberry}\}$ and $A = \{\text{apple, coconut, blueberry, cherry}\}$, write the complement of A .

Name _____

1. Set $A = \{1, 3, 5, 7, 9\}$

Set $B = \{2, 4, 6, 8, 10\}$

(a) Find the intersection of A and B .

(b) Find the union of A and B .

2. If the universal set, $U = \{\text{soccer, basketball, football, lacrosse, hockey, golf, cheerleading}\}$ and $A = \{\text{lacrosse, hockey, golf}\}$, write the complement of A .

Orange: Sets

Name Key

1. Set $A = \{x \mid x \text{ is a factor of } 32\} \rightarrow \{1, 2, 4, 8, 16, 32\}$
Set $B = \{2, 4, 6, 8, 10\}$

(a) Find the intersection of A and B .

$$A \cap B = \{2, 4, 8\}$$

(b) Find the union of A and B .

$$A \cup B = \{1, 2, 4, 6, 8, 10, 16, 32\}$$

2. If the universal set, $U = \{\text{January, February, March, April, May, June, July, August, September, October, November, December}\}$ and $A = \{\text{January, June, September, October}\}$, write the complement of A .

$$A' = \{\text{February, March, April, May, July, August, November, December}\}$$

Name Key

1. Set $A = \{x \mid x \text{ is a factor of } 16\} \rightarrow \{1, 2, 4, 8, 16\}$
Set $B = \{x \mid x \text{ is a factor of } 24\} \rightarrow \{1, 2, 3, 4, 6, 8, 12, 24\}$

(a) Find the intersection of A and B .

$$A \cap B = \{1, 2, 4, 8\}$$

(b) Find the union of A and B .

$$A \cup B = \{1, 2, 3, 4, 6, 8, 12, 16, 24\}$$

2. If the universal set, $U = \{\text{Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday}\}$ and $A = \{\text{Saturday, Sunday}\}$, write the complement of A .

$$A' = \{\text{Monday, Tuesday, Wednesday, Thursday, Friday}\}$$

Name Key

1. Set $A = \{x \mid x \text{ is a factor of } 42\} \rightarrow \{1, 2, 3, 6, 7, 12, 21, 42\}$
Set $B = \{1, 3, 5, 7, 9\}$

(a) Find the intersection of A and B .

$$A \cap B = \{1, 3, 7\}$$

(b) Find the union of A and B .

$$A \cup B = \{1, 2, 3, 5, 6, 7, 9, 12, 21, 42\}$$

2. If the universal set, $U = \{\text{apple, coconut, peach, blueberry, cherry, strawberry}\}$ and $A = \{\text{apple, coconut, blueberry, cherry}\}$, write the complement of A .

$$A' = \{\text{peach, strawberry}\}$$

Name Key

1. Set $A = \{1, 3, 5, 7, 9\}$
Set $B = \{2, 4, 6, 8, 10\}$

(a) Find the intersection of A and B .

$$A \cap B = \emptyset$$

(b) Find the union of A and B .

$$A \cup B = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

2. If the universal set, $U = \{\text{soccer, basketball, football, lacrosse, hockey, golf, cheerleading}\}$ and $A = \{\text{lacrosse, hockey, golf}\}$, write the complement of A .

$$A' = \{\text{soccer, basketball, football, cheerleading}\}$$