SET THEORY AND CONDITIONAL STATEMENTS - PRACTICE TEST | NEW BRUNSWICK FOUNDATIONS OF MATHEMATICS 120 · UNIT B · 10 QUESTIONS

Set Theory and Conditional Statements — Practice Test

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1 **In a Venn diagram, 25 elements are in set A only, 15 are in both sets, and 10 are in set B only. The number of elements in the union of A and B is**

Question 1

In a Venn diagram, 25 elements are in set A only, 15 are in both sets, and 10 are in set B only. The number of elements in the union of A and B is

ANSWER

Understand It with Pulse | Flag a mistake

2 **Set A has 30 elements and set B has 16 elements, with 12 elements in both. The number in A or B is**

ANSWER

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3 **A universal set has 30 elements and set A has 18 elements. The number of elements in the complement of A is**

ANSWER

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4 **In a Venn diagram, 30 elements are in set A only, 20 are in both sets, and 8 are in set B only. The number of elements in set A is**

Question 4

In a Venn diagram, 30 elements are in set A only, 20 are in both sets, and 8 are in set B only. The number of elements in set A is

ANSWER

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5 **The converse of the statement if n is prime then n is odd is**

A if not n is prime then not n is odd

B if not n is odd then not n is prime

C if n is odd then n is prime

D if n is prime and n is odd

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6 **The converse of the statement if x is even then x is divisible by 2 is**

- **A** if x is divisible by 2 then x is even
- **B** if not x is even then not x is divisible by 2
- **C** if not x is divisible by 2 then not x is even
- **D** if x is even and x is divisible by 2

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7 **In a Venn diagram, 30 elements are in set A only, 20 are in both sets, and 8 are in set B only. The number of elements in the union of A and B is**

Question 7

In a Venn diagram, 30 elements are in set A only, 20 are in both sets, and 8 are in set B only. The number of elements in the union of A and B is

ANSWER _____

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8 **Set A has 40 elements and set B has 25 elements, with 15 elements in both. The number in A or B is**

ANSWER _____

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9 **In a Venn diagram, 12 elements are in set A only, 8 are in both sets, and 5 are in set B only. The number of elements in the union of A and B is**

Question 9

In a Venn diagram, 12 elements are in set A only, 8 are in both sets, and 5 are in set B only. The number of elements in the union of A and B is

ANSWER

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10 **Set A has 50 elements and set B has 28 elements, with 20 elements in both. The number in A or B is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	50	**5.**	C	**9.**	25
2.	34	**6.**	A	**10.**	58
3.	12	**7.**	58		
4.	50	**8.**	50		

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