PRINCE EDWARD ISLAND FOUNDATIONS OF MATHEMATICS 11 · UNIT A

Logical Reasoning — Practice Test

Prince Edward Island Foundations of Mathematics 11 • 25 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A set with 2 elements has how many subsets in total**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A survey finds 120 people like apples, 90 people like pears, and 40 people like both fruits. How many people like at least one of the two fruits**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **In a class, 40 students play soccer, 30 students play hockey, and 15 students play both sports. How many students play at least one of the two sports**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A truth table for the variables p and q has how many rows**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A truth table for the variables p, q and r has how many rows**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A truth table for the variables p, q, r and s has how many rows**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A truth table for the variables p, q, r, s and t has how many rows**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A truth table for the variables p, q, r, s, t and u has how many rows**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **Begin with If a light is switched on, then electricity flows through it. Rewrite it as If electricity flows through it, then a light is switched on. This rewritten statement is the**

A inverse

B converse

C contrapositive

D negation

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10 **Begin with If a number is a multiple of six, then the number is a multiple of three. Rewrite it as If the number is a multiple of three, then a number is a multiple of six. This rewritten statement is the**

- A inverse
- B contrapositive
- C negation
- D converse

Understand It with Pulse | Flag a mistake

11 **Begin with If a number is even, then it is divisible by two. Rewrite it as If a number is even is not true, then it is divisible by two is not true. This rewritten statement is the**

- A inverse
- B converse
- C contrapositive
- D original statement

Understand It with Pulse | Flag a mistake

12 **Begin with If a number is greater than ten, then the number is greater than five. Rewrite it as If a number is greater than ten is not true, then the number is greater than five is not true. This rewritten statement is the**

A inverse

B converse

C contrapositive

D original statement

Understand It with Pulse | Flag a mistake

13 **Begin with If a person is a teenager, then the person is younger than twenty. Rewrite it as If the person is younger than twenty, then a person is a teenager. This rewritten statement is the**

A inverse

B contrapositive

C negation

D converse

Understand It with Pulse | Flag a mistake

14 **Begin with If a plant receives sunlight, then the plant grows. Rewrite it as If a plant receives sunlight is not true, then the plant grows is not true. This rewritten statement is the**

A converse

B contrapositive

C inverse

D original statement

Understand It with Pulse | Flag a mistake

15 **Begin with If a shape is a square, then it has four sides. Rewrite it as If it has four sides, then a shape is a square. This rewritten statement is the**

A inverse

B contrapositive

C negation

D converse

Understand It with Pulse | Flag a mistake

16 **Begin with If a student studies, then the student passes the test. Rewrite it as If the student passes the test, then a student studies. This rewritten statement is the**

A inverse

B converse

C contrapositive

D negation

Understand It with Pulse | Flag a mistake

17 **Begin with If a triangle is equilateral, then it has three equal angles. Rewrite it as If a triangle is equilateral is not true, then it has three equal angles is not true. This rewritten statement is the**

A converse

B contrapositive

C inverse

D original statement

Understand It with Pulse | Flag a mistake

18 **Begin with If it rains, then the ground is wet. Rewrite it as If it rains is not true, then the ground is wet is not true. This rewritten statement is the**

A converse

B contrapositive

C inverse

D original statement

Understand It with Pulse | Flag a mistake

19 **Start with the statement If a light is switched on, then electricity flows through it. Change it to If electricity flows through it is not true, then a light is switched on is not true. This new statement is the**

A converse

B inverse

C negation

D contrapositive

Understand It with Pulse | Flag a mistake

20 **A set with 3 elements has how many subsets in total**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A survey finds 85 people like apples, 70 people like pears, and 35 people like both fruits. How many people like at least one of the two fruits**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **In a class, 55 students play soccer, 42 students play hockey, and 20 students play both sports. How many students play at least one of the two sports**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A set with 4 elements has how many subsets in total**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A survey finds 150 people like apples, 110 people like pears, and 60 people like both fruits. How many people like at least one of the two fruits**

ANSWER

Understand It with Pulse | Flag a mistake

25 **In a class, 28 students play soccer, 36 students play hockey, and 12 students play both sports. How many students play at least one of the two sports**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	4	**10.**	D	**19.**	D
2.	170	**11.**	A	**20.**	8
3.	55	**12.**	A	**21.**	120
4.	4	**13.**	D	**22.**	77
5.	8	**14.**	C	**23.**	16
6.	16	**15.**	D	**24.**	200
7.	32	**16.**	B	**25.**	52
8.	64	**17.**	C		
9.	B	**18.**	C		

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