Mathematical Reasoning and Angle Relationships — Practice Test

Northwest Territories Foundations of Mathematics 11 (MFOM-11) • 10 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 **Each interior angle of a regular pentagon measures**

- **A** 108°
- **B** 120°
- **C** 90°
- **D** 135°

Understand It with Pulse | Flag a mistake

2 The sum of the interior angles of a heptagon (7 sides) is

- A 720°
- B 900°
- C 1080°
- D 1260°

Understand It with Pulse | Flag a mistake

3 A central angle measures 120°. An inscribed angle subtending the same arc measures

- A 240°
- B 120°
- C 60°
- D 30°

Understand It with Pulse | Flag a mistake

4 An angle inscribed in a semicircle measures

- A 45°
- B 60°
- C 90°
- D 180°

Understand It with Pulse | Flag a mistake

5 In equilateral triangle DEF, angle D measures 60°. Angle E measures

- A 30°
- B 60°
- C 90°
- D 120°

Understand It with Pulse | Flag a mistake

6 **The converse of the statement If a shape is a square, then it has four equal sides is**

- **A** If a shape has four equal sides, then it is a square
- **B** If a shape is not a square, then it does not have four equal sides
- **C** If a shape does not have four equal sides, then it is not a square
- **D** If a shape is a square, then it does not have four equal sides

Understand It with Pulse | Flag a mistake

7 **A student observes that $2^2 = 4$, $3^2 = 9$, and $4^2 = 16$. The conjecture that the square of a whole number is greater than the number is**

- **A** true for every whole number
- **B** false, because $1^2 = 1$
- **C** false, because $5^2 = 25$
- **D** true only for even numbers

Understand It with Pulse | Flag a mistake

8 **Two angles of a triangle are complementary. If one measures 29°, the other measures**

A 151°

B 61°

C 29°

D 71°

Understand It with Pulse | Flag a mistake

9 **The number of sides of a polygon whose interior angle sum is 1440° is**

A 8

B 9

C 10

D 12

Understand It with Pulse | Flag a mistake

10 **If all squares are rectangles and ABCD is a square, then deductive reasoning shows that ABCD is**

A a rectangle

B a triangle

C a circle

D not a rectangle

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**5.**	B	**9.**	C
2.	B	**6.**	A	**10.**	A
3.	C	**7.**	B		
4.	C	**8.**	B		

© 2026 Brett Robbins. All Rights Reserved.