NOVA SCOTIA MATHEMATICS AT WORK 12 · UNIT D · 25 QUESTIONS

Polygons, Transformations and Trigonometry — Practice Test

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 right triangle has legs 3 and 4. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A right triangle has legs 6 and 8. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A right triangle has legs 5 and 12. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A right triangle has legs 9 and 12. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A right triangle has legs 8 and 15. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A right triangle has legs 12 and 16. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A right triangle has legs 7 and 24. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A right triangle has legs 10 and 24. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A right triangle has legs 20 and 21. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A right triangle has legs 15 and 20. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **A right triangle has legs 9 and 40. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **A right triangle has legs 12 and 35. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **A right triangle has legs 18 and 24. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **A right triangle has legs 30 and 40. Find the hypotenuse.**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The sum of interior angles of a triangle is**

A 180 degrees

B 90 degrees

C 360 degrees

D 270 degrees

Understand It with Pulse | Flag a mistake

16 **The sum of interior angles of a quadrilateral is**

A 180 degrees

B 360 degrees

C 540 degrees

D 90 degrees

Understand It with Pulse | Flag a mistake

17 **A regular polygon has**

A all sides different

B all angles different

C all sides and all angles equal

D no equal sides

Understand It with Pulse | Flag a mistake

18 **A translation moves a shape**

A by turning it

B by flipping it

C by shrinking it

D without turning or flipping it

Understand It with Pulse | Flag a mistake

19

A rotation turns a shape

A around a fixed point

B across a line

C to a larger size

D to a smaller size

Understand It with Pulse | Flag a mistake

20

A reflection flips a shape

A around a point

B across a line

C by sliding it

D by stretching it

Understand It with Pulse | Flag a mistake

21 **In a right triangle, the side opposite the right angle is**

A the adjacent side

B the opposite side

C the hypotenuse

D a leg

Understand It with Pulse | Flag a mistake

22 **For angle A in a right triangle, sin A equals**

A adjacent over hypotenuse

B opposite over adjacent

C hypotenuse over opposite

D opposite over hypotenuse

Understand It with Pulse | Flag a mistake

23 **For angle A in a right triangle, cos A equals**

- A adjacent over hypotenuse
- B opposite over hypotenuse
- C opposite over adjacent
- D hypotenuse over adjacent

Understand It with Pulse | Flag a mistake

24 **For angle A in a right triangle, tan A equals**

- A adjacent over hypotenuse
- B opposite over adjacent
- C opposite over hypotenuse
- D hypotenuse over opposite

Understand It with Pulse | Flag a mistake

25 **Pythagoras theorem for a right triangle states**

A $a + b = c$

B $a^2 - b^2 = c^2$

C $a^2 + b^2 = c^2$

D $a \times b = c$

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	5	**10.**	25	**19.**	A
2.	10	**11.**	41	**20.**	B
3.	13	**12.**	37	**21.**	C
4.	15	**13.**	30	**22.**	D
5.	17	**14.**	50	**23.**	A
6.	20	**15.**	A	**24.**	B
7.	25	**16.**	B	**25.**	C
8.	26	**17.**	C		
9.	29	**18.**	D		

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