MATHS STANDARD YEAR 11 - MODULE 2 - LESSON 3

Pythagoras' Theorem

Use this worksheet after reading the lesson to practise the key ideas and prove you can meet the success criteria.

Name _____

Date _____

Class _____

1. Key Ideas

Know two sides of a right-angled triangle — find the third. Every diagonal, slant height, and distance problem in this module comes back to this.

- The relationship $a^2 + b^2 = c^2$ and what each pronumeral represents
- Why identifying the hypotenuse correctly is the critical first step

2. Success Criteria

By the end, you should be able to:

- The relationship $a^2 + b^2 = c^2$ and what each pronumeral represents
- The two types of Pythagoras problems: finding the hypotenuse vs finding a shorter side
- How Pythagoras applies to practical and 3D contexts

3. Key Terms

Key idea
The central concept from Pythagoras' Theorem.

Evidence
Information, observations or calculations used to support an answer.

Explain
Give a reasoned answer that links cause and effect.

Apply
Use a learned idea in a new example, problem or scenario.

4. Activity: Build the Lesson Map

Use the lesson to complete the table. Keep answers brief but specific.

Prompt	Your answer
Main concept	
Important example	
Common mistake to avoid	
How this links to the next lesson	

5. Short Answer Questions

1. Explain this lesson goal in your own words: "The relationship $a^2 + b^2 = c^2$ and what each pronumeral represents". Use one specific example from the lesson.

BAND 3 2 MARKS

2. Apply this idea to a new example: "The two types of Pythagoras problems: finding the hypotenuse vs finding a shorter side". Show your reasoning clearly.

BAND 4 3 MARKS

3. Analyse why this idea matters for understanding Pythagoras' Theorem: "How Pythagoras applies to practical and 3D contexts".

BAND 5 4 MARKS

6. Extend: Apply the Idea

BAND 5/6 5 MARKS

A student gives a memorised answer about Pythagoras' Theorem but does not use evidence or reasoning.

Improve the answer by writing a stronger response that uses accurate terminology, a relevant example and a clear explanation.

7. Multiple Choice

1. What is the best first step when answering a question about Pythagoras' Theorem?

☐ A. Identify the key concept being tested

☐ B. Write every fact from memory

☐ C. Ignore the command word

☐ D. Skip examples and evidence

2. Which answer would show stronger understanding of Pythagoras' Theorem?

☐ A. An answer with accurate terms and reasoning

☐ B. A copied definition only

☐ C. A single-word response

☐ D. An answer with no example

3. What should you do if a question asks you to explain?

☐ A. Link the idea to a reason or cause

☐ B. List unrelated facts

☐ C. Only draw a diagram

☐ D. Write the shortest possible answer

8. Success Criteria Proof

Finish with evidence that you can do each success criterion.

SUCCESS CRITERION 1

Prove that you can: The relationship $a^2 + b^2 = c^2$ and what each pronumeral represents

BAND 3 2 MARKS

SUCCESS CRITERION 2

Prove that you can: The two types of Pythagoras problems: finding the hypotenuse vs finding a shorter side

BAND 4 3 MARKS

SUCCESS CRITERION 3

Prove that you can: How Pythagoras applies to practical and 3D contexts

BAND 5 4 MARKS

One thing I still need help with: