

## UNIT 3 *Pythagoras' Theorem*

## Lesson Plans

**St**

*These are based on 45/50 minute lessons.*

<i>Lesson No.</i>	<i>Suggested Plan</i>	<i>References</i>
<b>1.</b>	<b>Introduction to Pythagoras' Theorem</b>	
	Introduction	OS 3.1
	Worked examples - interactively	PB 3.1, Example 1
	Exercise and review	PB 3.1, Q1
	Exercise - ongoing review and discussion	PB 3.1, Q2
	Set homework	PB 3.1, complete Q2 or Activity 3.1
<b>2.</b>	<b>Pythagorean Triples</b>	
	Discuss homework	
	Finding right angles	OS 3.2
	Pythagorean triples	PB 3.1, Q4
	Review answers	
	Extended work	Activity 3.4
	Set homework	Complete Activity 3.4 or Activity 3.2
<b>3.</b>	<b>Finding the Length of the Hypotenuse</b>	
	Discuss homework	
	Introduction	OS 3.3
	Exercises - ongoing review and discussion	PB 3.2, Q1
	Length of diagonal	OS 3.4
	Exercises	PB 3.2, Q3
	Review answers	
	Mental Test	M 3.1
	Set homework	PB 3.2, Q2 or Q4
<b>4.</b>	<b>Problems in Context</b>	
	Discuss homework	
	Introduction - ladder problem	OS 3.7
	Exercises	PB 3.4, Q2
	Review answers	
	Navigation problem	OS 3.8
	Exercises	PB 3.4, Q1
	Review answers	
	Set homework	PB 3.4, Q4

---

**UNIT 3** Pythagoras' Theorem

**Lesson Plans**
**St**

<i>Lesson No.</i>	<i>Suggested Plan</i>	<i>References</i>
<b>5.</b>	<b>Constructions</b>	
	Discuss homework	
	Worked example	PB 3.5, Example 1
	Recap - measuring angles	
	Worked example	PB 3.5, Example 2
	Exercises	PB 3.5, Q1
	Review answers	
	Set homework	PB 3.5, Q2
<b>6.</b>	<b>Revision Test</b>	
	Discuss homework	
	Revision Test	RT 3.1
<b>7.</b>	<b>Recap</b>	
	Give back marked tests	
	Go over test questions interactively	
	Revise topics	

---

## UNIT 3 *Pythagoras' Theorem*

## Lesson Plans



<i>Lesson No.</i>	<i>Suggested Plan</i>	<i>References</i>
<b>1.</b>	<b>Introduction to Pythagoras' Theorem</b>	
	Introduction	OS 3.1
	Worked examples - interactively	PB 3.1, Example 1
	Exercise and review	PB 3.1, Q1
	Exercise - ongoing review and discussion	PB 3.1, Q2
	Set homework	PB 3.1, complete Q2 or Activity 3.1
<b>2.</b>	<b>Pythagorean Triples</b>	
	Discuss homework	
	Finding right angles	OS 3.2
	Pythagorean triples	PB 3.1, Q4
	Review answers	
	Extended work	Activity 3.4
	Set homework	Complete Activity 3.4 or Activity 3.2
<b>3.</b>	<b>Finding the Length of the Hypotenuse</b>	
	Discuss homework	
	Introduction	OS 3.3
	Exercise - ongoing review and discussion	PB 3.2, Q1
	Length of diagonal	OS 3.4
	Exercises	PB 3.2, Q3
	Review answers	
	Exercises	PB 3.2, Q5
	Review answers	
	Set homework	PB 3.2, Q2 and Q7
<b>4.</b>	<b>Calculating the Lengths of Other Sides</b>	
	Discuss homework	
	Introduction	OS 3.5
	Exercises	PB 3.3, Q1
	Review answers	
	Finding the height of an isosceles triangle	OS 3.6
	Exercises	PB 3.3, Q3
	Review answers	
	Exercises	PB 3.3, Q5
	Review answers	
	Set homework	PB 3.3, Q6 and Q9

---

**UNIT 3** *Pythagoras' Theorem*
**Lesson Plans**

<i>Lesson No.</i>	<i>Suggested Plan</i>	<i>References</i>
<b>5.</b>	<b>Problems in Context</b>	
	Discuss homework	
	Introduction - ladder problem	OS 3.7
	Exercises	PB 3.4, Q2
	Review answers	
	Navigation problems	OS 3.8
	Exercises	PB 3.4, Q3
	Review answers	
	Mental Test	M 3.2
	Problems	PB 3.4, Q8, Q9 and Q10
	Set homework	Complete problems
<b>6.</b>	<b>Constructions</b>	
	Discuss homework	
	Worked example	PB 3.5, Examples 1 and 2
	Exercises	PB 3.5, Q1
	Review answers	
	Exercises	PB 3.5, Q2
	Review answers	
	Set homework	PB 3.5, Q3 or Q6
<b>7.</b>	<b>Revision Test</b>	
	Discuss homework	
	Revision Test	RT 3.2
<b>8.</b>	<b>Recap</b>	
	Give back marked tests	
	Go over test questions interactively	
	Revise topics	

---

## UNIT 3 *Pythagoras' Theorem*

## Lesson Plans

# E

<i>Lesson No.</i>	<i>Suggested Plan</i>	<i>References</i>
<b>1.</b>	<b>Pythagoras' Theorem</b>	
	Introduction and finding right angles	OS 3.1 and OS 3.2
	Exercises	PB 3.1, Q1 and Q2
	Review answers	
	Pythagorean triples	PB 3.1, Q4
	Proof of theorem	Activity 3.1
	Set homework	Complete Activity 3.1 or Activity 3.4
<b>2.</b>	<b>Finding the Length of the Hypotenuse</b>	
	Discuss homework	
	Introduction	OS 3.3
	Exercise - ongoing review and discussion	PB 3.2, Q1
	Length of diagonal	OS 3.4
	Exercises	PB 3.2, Q3
	Review answers	
	Exercises	PB 3.2, Q5
	Review answers	
	Set homework	PB 3.2, Q2 and Q7
<b>3.</b>	<b>Calculating the Lengths of Other Sides</b>	
	Discuss homework	
	Introduction	OS 3.5
	Exercises	PB 3.3, Q1
	Review answers	
	Finding the height of an isosceles triangle	OS 3.6
	Exercises	PB 3.3, Q3
	Review answers	
	Exercises	PB 3.3, Q5
	Review answers	
	Set homework	PB 3.3, Q6 and Q9
<b>4.</b>	<b>Problems in Context</b>	
	Discuss homework	
	Introduction - ladder problem	OS 3.7
	Exercises	PB 3.4, Q2
	Review answers	
	Navigation problems	OS 3.8
	Exercises	PB 3.4, Q3
	Review answers	
	Mental Test	M 3.3
	Problems	PB 3.4, Q8, Q9 and Q10
	Set homework	Complete problems

---

**UNIT 3** *Pythagoras' Theorem*
**Lesson Plans****E**

<i>Lesson No.</i>	<i>Suggested Plan</i>	<i>References</i>
<b>5.</b>	<b>Constructions</b> Discuss homework Worked example Exercises Review answers Exercises Review answers Set homework	  PB 3.5, Examples 1 and 2 PB 3.5, Q1  PB 3.5, Q2  PB 3.5, Q3 or Q6
<b>6.</b>	<b>Revision Test</b> Discuss homework Revision Test	  RT 3.3
<b>7.</b>	<b>Recap</b> Give back marked tests Go over test questions interactively Revise topics	

---