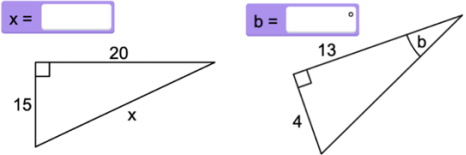
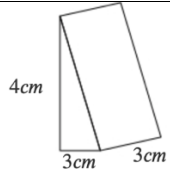
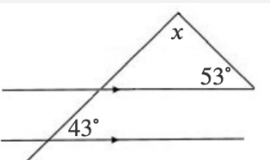
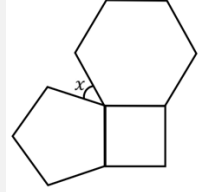
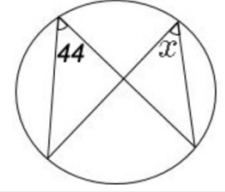


## Year 9 Term 2

Learning Aim	Developing	Securing	Mastering
Pythagoras & Trigonometry		Apply formula for both Pythagoras and trigonometric ratios to find missing edges in right angled triangles Apply trigonometric ratios to find missing angles	<b>Problem solve eg. Pythag needed to find area in a multi-step question</b>
Examples			 <p>Find the surface area of the prism</p>
Angles	Apply properties of angles in triangles, quadrilaterals and parallel lines	Derive sum of angles in a triangle to problem solve irregular polygons. Use the formula triangle for regular polygons. Apply angle properties to multistep questions	Apply angle facts in congruence and similarity for simple proofs <b>Intro to circle theorems</b>
			
Number Measure	Convert between standard form & ordinary nos Convert between metric units (one step) Work in 24 hour clock	<b>Multiply and divide in standard form</b> Convert between metric units (two step) Journey planning, timetables	<b>Four operations and application of standard form</b> Use compound units in D/S/T questions
	Change 243700000 in to standard form Write 3.4m in cms Add 2 hours and 43 minutes to 11:38	Work out $(2.3 \times 10^3) \times (6 \times 10^7)$ Write 0.42m in mm	Philip runs at an average speed of 4 m/s. How long will it take Philip to complete a 10 kilometre race? Give your answer in minutes and seconds.

### Extension opportunities

Trig in unusual places  
Combined Pythag & Trig questions  
Worded Standard form problems

You can find practice on all the topics taught this term at [Mathsworkout.co.uk](http://Mathsworkout.co.uk).

Login: sarum. Password: solid92

Go to Geometry; section 01, 07,08,19,20 & 21 Number; section 22  
Choosing the right level of difficulty for you within each topic area.