

Common Wording	Topic / Method Assessed
Express..... in the form $(x - a)^2 + b$	Completing the Square Half, Square, Remove
Graph of $y = ax^2$. Find the value of a	Substitute given point for x and y.
Simplify $\sqrt{a} + \sqrt{b} + \sqrt{c}$ in its simplest form	Express all surds in form of smallest surd
Find the gradient of the line Find the y-intercept Crosses the x-axis....	Express in the form $y = mx + c$. Look for c or substitute $x = 0$ Substitute $y = 0$
State the equation of the axis of symmetry	Quadratic Graph: State as $x = ?$
Coordinates of turning point of $(x - a)^2 + b$	Point (a,b) Signs.....(Change) Keep
Show that.....= (given expression/equation) Particularly towards the end of the paper and you are asked to show how a trinomial can be formed	Start with knowledge of obvious formula and build up to the expression given. Remember that the supplementary part to the question can still be attempted without success in the first. Just use the trinomial given.
Find the point of intersection of the lines.....	Simultaneous equations
Find the depth of liquid, height of tunnel, etc	Pythagoras in the circle (use half of chord length and radius as hypotenuse)
Angles and circles Calculate the angle.....	Look for right angles in semi circles and at tangents; use 2 radii for isosceles triangles and equal angles.
Find the resultant vector $\underline{u} - 3\underline{v}$	Multiply and subtract vectors as required
The graph of $y = a\sin bx$ is shown. Find a and b The graph of $y = a\cos bx$ is shown. Find a and b.	$a = (\max - \min) \div 2$ $b = \text{Number of cycles graph makes within } 360^\circ$
Triangle diagram with 2 sides given and the angle between them also given	Cosine Rule or Area formula Read the question to determine which one.
Triangle diagram – all 3 sides given	Cosine rule (angle formula starting $\cos A = \dots$) Possibly Converse of Pythagoras if asked to check for a right angle (compass directions)
Solve $ax^2 + bx + c = 0$ correct to one d.p.	Use the quadratic formula from the formula list. Useful to evaluate the discriminant first
Two shapes are mathematically similar	Find the Scale Factor a ; Area Factor = a^2 ; Vol. Factor a^3