

Maths Workout - Geometry & Measures

Topic 16 - Scale Drawings				
Target 1	Target 2	Target 3	Target 4	Target 5
<i>Understand and measure angles of elevation & depression</i>	<i>Use a scale to calculate real and map distances</i>	<i>Read and measure a 3-figure bearing</i>	<i>Locate a point and the relative position of 2 points on a scale drawing given a bearing and a distance</i>	<i>Construct a triangle Solve a scale drawing problem with bearings</i>
1. Demo: Understand how an angle of elevation is measured	1. Simplify a map scale expressed as a ratio of quantities: unitary ratios	1. Demo: Understand how 3-figure bearings are written and calculated	1. Use a 360° angle measurer to locate a point on a given bearing	1. Construct a triangle given 1 side and 2 angles
2. Demo: Understand how an angle of depression is measured	2. Simplify a map scale expressed as a ratio of quantities	2. Use a 360° angle measurer to measure a bearing	2. Locate a point on a given bearing	2. Construct a triangle given 1 side and 2 angles: measure the sides produced
3. Measure an angle of elevation with a protractor	3. Convert between scales expressed with units and scales expressed as pure ratios	3. Read a 3-figure bearing given clockwise angle	3. Locate the relative position of 2 points given a bearing measured from either point	3. Construct a triangle given 2 sides and the included angle
4. Measure an angle of depression with a protractor	4. Calculate the real distance given the scale and the map distance	4. Read a 3-figure bearing less than 100° given clockwise angle	4. Locate the relative position of 2 points given a bearing and the distance: scale 1cm:1km	4. Construct a triangle given 2 sides and the included angle: measure 1 angle and the side produced
	5. Calculate the map distance given the scale and the real distance	5. Read a 3-figure bearing given anticlockwise angle	5. Locate the relative position of 2 points given a bearing and the distance: scale 1cm:2km	5. Solve a bearing problem by completing a scale drawing
	6. Calculate the real or map distance given the scale	6. Read the bearing of A from P or P from A given a connecting angle	6. Locate the relative position of 2 points given a bearing and the distance: scale 1cm:5km	6. Solve a bearing problem by completing a scale drawing
		7. Use an ordinary 180° protractor to measure a bearing of A from P or P from A	7. Locate the relative position of 2 points given a bearing and the distance: variable scale in ratio form	