**Construction and Scale Drawings**

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| **1)** Construct an angle of 60 °      | [1]   |
| **2)** Construct the perpendicular bisector of the line AB belowhttp://www.mathster.com/course/simgs/123339169128_1.png      | [1]   |
| **3)** Construct the angle bisector of angle ABC belowhttp://www.mathster.com/course/simgs/123339169128_2.png      | [1]   |
| **4)** Construct a perpendicular to AB at the point Chttp://www.mathster.com/course/simgs/123339169128_3.png      | [1]   |
| **5)** Construct a perpendicular from point C to ABhttp://www.mathster.com/course/simgs/123339169128_4.png      | [1]   |
| **6)** Construct triangle ABC with sides of length 7.8 cm as shown in the diagram below (not drawn to scale).http://www.mathster.com/course/simgs/123339169128_5.pngMeasure the perpendicular height of your construction in centimetres (to the nearest mm).       | [1]   |
| **7)** Construct a triangle ABC with a base length AB = 8.1 cm and sides AC = 6 cm and BC = 6 cm as shown in the diagram below.http://www.mathster.com/course/simgs/123339169128_6.pngMeasure the perpendicular height of your construction from the base AB in centimetres (to the nearest mm).       | [1]   |
| **8)** Construct a triangle ABC with a base length AB = 8.3 cm and sides AC = 6.7 cm and BC = 5.4 cm as shown in the diagram below.http://www.mathster.com/course/simgs/123339169128_7.pngMeasure the perpendicular height of your construction from the base AB in centimetres (to the nearest mm).       | [1]   |
| **9)** Construct triangle ABC where base AB = 8.5 cm, AC = 6 cm and angle BAC = 46 ° as shown in the diagram below.http://www.mathster.com/course/simgs/123339169128_8.pnga) Measure the length BC of your construction, giving your answer in centimetres (to the nearest mm).b) Measure angle ABC on your construction, giving your answer to the nearest degree.      | [1]   |
| **10)** Construct a triangle ABC with a base length AB = 8.3 cm and sides AC = 5.3 cm and BC = 6 cm.Measure the perpendicular height from the base AB in centimetres (to the nearest mm).       | [1]   |
| **11)** The diagram shows a field with length 240 metres and width 180 metres.http://www.mathster.com/course/simgs/123339169128_9.pngUse a scale of 1 cm to 20 m to make an accurate scale drawing of the field.Find the diagonal distance across the field.Give your answer to the nearest metre.       | [1]   |
| **12)** The diagram shows a sketch of a triangle ABC with base length AB = 30 m and sides AC = 15 m and BC = 18 m.http://www.mathster.com/course/simgs/123339169128_10.pngUse a scale of 1 cm to 3 m to make an accurate scale drawing of the triangle.Find the perpendicular height from the base AB of the triangle by measuring your construction.Give your answer to the nearest metre.       | [1]   |

**Solutions for the assessment Construction and Scale Drawings**

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| **1)** http://www.mathster.com/course/simgs/123339169128_11.png |
| **2)** http://www.mathster.com/course/simgs/123339169128_12.png |
| **3)** http://www.mathster.com/course/simgs/123339169128_13.png |
| **4)** http://www.mathster.com/course/simgs/123339169128_14.png |
| **5)** http://www.mathster.com/course/simgs/123339169128_15.png |
| **6)** Perpendicular height = 6.8 cm | **7)** Perpendicular height = 4.4 cm |
| **8)** Perpendicular height = 4.3 cm | **9)** a) BC = 6.1 cm, b) angle ABC = 45 ° |
| **10)** Perpendicular height = 3.8 cm | **11)** Diagonal distance = 300 m |
| **12)** Perpendicular height = 7 m |  |