**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/46986350112_1.png      | [1]   |
| **3)** Construct the angle bisector of angle ABC belowhttp://www.mathster.com/course/simgs/46986350112_2.png      | [1]   |
| **4)** Construct a perpendicular to AB at the point Chttp://www.mathster.com/course/simgs/46986350112_3.png      | [1]   |
| **5)** Construct a perpendicular from point C to ABhttp://www.mathster.com/course/simgs/46986350112_4.png      | [1]   |
| **6)** Construct triangle ABC with sides of length 6.1 cm as shown in the diagram below (not drawn to scale).http://www.mathster.com/course/simgs/46986350112_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 = 7.6 cm and sides AC = 6.3 cm and BC = 6.3 cm as shown in the diagram below.http://www.mathster.com/course/simgs/46986350112_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 = 8.5 cm and sides AC = 6.6 cm and BC = 5.1 cm as shown in the diagram below.http://www.mathster.com/course/simgs/46986350112_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 = 8.3 cm, AC = 7.8 cm and angle BAC = 49 ° as shown in the diagram below.http://www.mathster.com/course/simgs/46986350112_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 = 8.1 cm and sides AC = 7 cm and BC = 5.7 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/46986350112_9.pngUse a scale of 1 cm to 30 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 = 27 m and sides AC = 18 m and BC = 15 m.http://www.mathster.com/course/simgs/46986350112_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/filter/graph/imgs/aab8d6e70174ad56cbb679afcbe473f3.png |
| **2)** http://www.mathster.com/filter/graph/imgs/4b8fdf7f0aada1d655ff97c5e07d0d17.png |
| **3)** http://www.mathster.com/course/simgs/46986350112_11.png |
| **4)** http://www.mathster.com/course/simgs/46986350112_12.png |
| **5)** http://www.mathster.com/course/simgs/46986350112_13.png |
| **6)** Perpendicular height = 5.3 cm | **7)** Perpendicular height = 5 cm |
| **8)** Perpendicular height = 4 cm | **9)** a) BC = 6.7 cm, b) angle ABC = 62 ° |
| **10)** Perpendicular height = 4.8 cm | **11)** Diagonal distance = 300 m |
| **12)** Perpendicular height = 9 m |  |