**End of Unit Test** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Construction and Loci - HIGHER**

**Q1.** You will need a ruler and a pair of compasses to answer this question.

Construct the perpendicular **from** point *P* to the line *L*.

You **must** show your construction arcs.



**(Total 3 marks)**

**Q2.** Jack is 1.28 metres tall. He has a tent in the shape of a triangular prism. The diagram shows the front view of the tent. Not drawn accurately.

Draw a scale drawing to work out if Jack can stand up in the middle of the tent. Show how you decide.

**Scale:** 1 cm represents 20 cm

 **(Total 3 marks)**

**Q3.** The diagram shows the positions of towns *A* and *B.* Not drawn accurately.



(a)     Circle the value, in degrees, of angle *x*.

44                  46                  54                  56                  64                  66

**(1)**

(b)     Write down the 3-figure bearing of *B* from *A*.

Answer ........................................................ degrees

**(1)**

(c) Town *C* is due North of *A*. Angle *ACB* = *x.* Not drawn accurately



Work out the 3-figure bearing of *C* from *B*.

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Answer .................................................................... °

**(3)**

**(Total 5 marks)**

**Q4.**  Use ruler and compasses to answer this question. Point *P* is

* the same distance from *AB* and *AD*
* 4 cm from C.

Show the position of *P* on the diagram.



 **(Total 3 marks)**

**Q5.** The scale drawing shows a post which is 1.5 metres from the fence.



(a) How far is the post from the wall?

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Answer .......................................................... metres

**(1)**

(b) A pony is tied to the post by a rope. The pony can reach 2.5 metres from the post. On the scale drawing, show accurately the area that the pony can reach.

**(2)**

(c) Work out the scale of the drawing as a ratio. Give your answer in its simplest form.

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Scale        ................... :   ...................

**(3)**

**(Total 6 marks)**

 **(Total for test = 20 marks)**