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

**Forming and Solving Equations - HIGHER**

1) Solve

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*y* = ...............................................................

**(Total 4 marks)**

2) Rearrange   to make *r* the subject.

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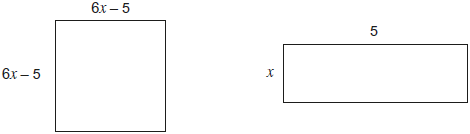
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Answer .............................................................................

**(Total 3 marks)**

3) The square and the rectangle have the same area. All lengths are in centimetres. Not drawn accurately.



(a) Show that      36*x*2 – 65*x* + 25 = 0

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**(2)**

(b) 36*x*2 – 65*x* + 25 = 0

Work out the value of *x*.

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*x* = .........................................................................................

**(4)**

**(Total 6 marks)**

4) You are given that     (*x* + *a*)2 – 7 ≡ *x*2 + 10*x* + *b*

Work out the values of *a* and *b*.

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*a* = ...................................................................................

*b* = ...................................................................................

**(Total 2 marks)**

5) Solve the simultaneous equations

*y* = *x*2 − 6*x* − 20

*y* = 4 − *x*

You **must** show your working.

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Answer ...................................................................................................

**(Total 5 marks)**

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