

Name: \_\_\_\_\_

Level 2 Further Maths



**Factorising Quadratics** Corbettmaths

Ensure you have: Pencil or pen

### Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Revision for this topic

[www.corbettmaths.com/more/further-maths/](http://www.corbettmaths.com/more/further-maths/)



1. Factorise  $x^2 + 8x - 105$

.....  
(2)

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2. Factorise  $x^2 - 29x + 180$

.....  
(2)

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3. Factorise  $2x^2 - x - 10$

.....  
(2)

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4. Factorise  $6x^2 + 13x + 6$

.....  
(2)

5. Factorise  $3x^2 - 17x + 10$

.....  
(2)

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6. Factorise  $4x^2 - 4x - 3$

.....  
(2)

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7. Factorise  $12x^2 + 5x - 3$

.....  
(2)

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8. Factorise  $12x^2 + 5x - 3$

.....  
(2)

9. Factorise  $20x^2 - 23x + 6$

.....  
(2)

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10. Factorise fully  $98 - 72x^2$

.....  
(2)

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11. Factorise fully  $27y^2 - 75x^2$

.....  
(2)

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12. Factorise fully  $x^4 - y^4$

.....  
(2)

13. Factorise fully  $1 - y^4$

.....  
(2)

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14. Factorise fully  $7x^2 - 28$

.....  
(2)

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15. Factorise  $2x^2 + 11xy + 15y^2$

.....  
(3)

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16. Factorise  $7x^2 + 20xy - 3y^2$

.....  
(3)

16. Factorise  $5x^2 - 13xy - 6y^2$

.....  
(3)

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17. Factorise  $7x^2 - 22xy + 16y^2$

.....  
(3)

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18. Factorise  $6x^2 - 35xy + 49y^2$

.....  
(3)

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19. (a) Factorise  $2x^2 + 7x - 15$

.....  
(2)

(b) Hence solve  $2(y - 3)^2 + 7(y - 3) - 15 = 0$

.....  
(3)

20. (a) Factorise  $3x^2 - 17x + 10$

.....  
**(2)**

(b) Hence solve  $3(y - 1)^2 - 17(y - 1) + 10 = 0$

.....  
**(3)**

21. (a) Factorise  $15x^2 + 32x + 16$

.....  
**(2)**

(b) Hence factorise  $15(y - 7)^2 + 32(y - 7) + 16$

.....  
**(3)**