

GCSE QUESTIONS

Q1. NON-CALCULATOR

Factorise $3n + 12$

.....
(Total for question = 1 mark)

Q2. NON-CALCULATOR

Factorise $4m + 12$

.....
(Total for question = 1 mark)

Q3. NON-CALCULATOR

Factorise $10x - 15$

.....
(Total for question = 1 mark)

Q4. NON-CALCULATOR

Factorise $6n - 4$

.....
(Total for question = 1 mark)

Q5. NON-CALCULATOR

Factorise $14b - 7$

.....
(Total for question = 1 mark)

Q6. NON-CALCULATOR

Factorise fully $20x^2 - 5$

.....
(Total for question = 2 marks)

Q7. NON-CALCULATOR

Factorise fully $50 - 2y^2$

.....
(Total for question = 2 marks)

Q8. NON-CALCULATOR

Factorise $m^2 + m$

.....
(Total for question = 1 mark)

Q9. NON-CALCULATOR

Factorise fully $9x^2 + 6x$

.....
(Total for question = 2 marks)

Q10. NON-CALCULATOR

Factorise fully $9b - 3b^2$

.....
(Total for question = 2 marks)

Q11. NON-CALCULATOR

Factorise $y^2 + 27y$

.....
(Total for question = 1 mark)

Q12. NON-CALCULATOR

(a) Factorise $5 - 10m$

.....
(1)

(b) Factorise fully $2a^2b + 6ab^2$

.....
(2)
(Total for question = 3 marks)

Q13. NON-CALCULATOR

Factorise $x^2 - 16$

.....
(Total for question is 1 mark)

Q14. NON-CALCULATOR

Factorise $a^2 - b^2$

.....
(Total for question = 1 mark)

Q15. NON-CALCULATOR

Factorise $x^2 - 169$

.....
(Total for question = 1 mark)

Q16. NON-CALCULATOR

Factorise $x^2 - 121$

.....
(Total for question = 1 mark)

Q17. NON-CALCULATOR

Factorise $y^2 + 7y + 6$

.....
(Total for question = 2 marks)

Q18. NON-CALCULATOR

Factorise $x^2 + 6x + 9$

.....
(Total for question = 1 mark)

Q19. NON-CALCULATOR

Factorise $x^2 + 4x + 3$

.....
(Total for question = 2 marks)

Q20. NON-CALCULATOR

Factorise $x^2 + 3x - 4$

.....
(Total for question is 2 marks)

Q21. NON-CALCULATOR

(a) Factorise $3f + 9$

.....
(1)

(b) Factorise $x^2 - 2x - 15$

.....
(2)
(Total for question = 3 marks)

Q22. NON-CALCULATOR

Factorise $3(x - y)^2 - 2(x - y)$

.....
(Total for question = 2 marks)

Q23. NON-CALCULATOR

Josh is trying to factorise $x^2 - 6x + 8$

His reasoning is,

because $4 \times 2 = 8$

and $4 + 2 = 6$

then $x^2 - 6x + 8 = (x + 4)(x + 2)$

(b) Explain what is wrong with Josh's reasoning.

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.....
(Total for question = 1 mark)