1st Class Maths

Long Division of Polynomials

Revise this topic →

← Check your work

This booklet features original exam style questions designed by me. They do not feature in past papers but are good practice for your exams.

The content is designed to reflect the style of the AQA Level 2 Certificate in Further Maths.
It may not be suitable for other courses.

@1stclassmaths

Answer **all** questions in the spaces provided.

Do not write outside the box

1 Use long division to find the result of $(x^3 + 9x^2 + 26x + 24) \div (x + 3)$

[2 marks]

Answer _____

2 Use long division to find the result of $(x^3 + 8x^2 + 17x + 10) \div (x + 5)$

[2 marks]

Answer _____

Do not write outside the box

3 Use long division to find the result of $(x^3 + 5x^2 + 2x - 8) \div (x + 2)$

[2 marks]

Answer _____

4 Use long division to find the result of $(x^3 - 4x^2 + x + 6) \div (x - 3)$

[2 marks]

Answer _____

8

Do not write outside the box

5 Use long division to find the result of $(2x^3 + 7x^2 - 17x - 10) \div (2x + 1)$

[2 marks]

Answer _____

6 Use long division to find the result of $(3x^3 - 4x^2 - 13x - 6) \div (3x + 2)$

[2 marks]

Answer _____

Do not write outside the box

7 Use long division to find the result of $(2x^3 + 9x^2 - 11x - 30) \div (x + 5)$

[2 marks]

Answer _____

8 Use long division to find the result of $(4x^3 + 16x^2 - x - 4) \div (2x - 1)$

[2 marks]

Answer _____

8

Turn over ►

Do not write outside the box

9 $(x + 3)$ divides into $(x^3 + 8x^2 + kx + 12)$ without remainder.

[4 marks]

Find the value of k.

$k =$ _____

10 Use long division to find the result of $(2x^4 - 10x^2 + 3x + 2) \div (x - 2)$

[3 marks]

Answer _____

7