

8300

GCSE MATHEMATICS

Foundation and Higher tier – Questions by Topic

Algebra

Factorising into one bracket

v1.0

Name _____

Materials

For this paper you must have:

- Mathematical instruments

Information

- The marks for questions are shown in brackets

Advice

- In all calculations, show clearly how you work out your answer

For questions 1 to 3 you must **NOT** use a calculator.



Q1.

Factorise $5a + 10$

(Total 1 mark)

Q2.

Factorise $15x + 5y$

(Total 1 mark)

Q3.

Factorise fully $2x^2 + 6x$

(Total 2 marks)

For the rest of the questions, you may use a calculator.



Q4.

Factorise $2x - 4$

(Total 1 marks)

Q5.

Factorise $12a + 15b$

(Total 1 mark)

Q6.

Factorise $21x + 28$

(Total 1 mark)

Q7.

Factorise fully $10a^2 + 25a$

(Total 2 marks)

Q8.

Factorise fully $50x + 100$

(Total 2 marks)

Questions 9 to 11 are **higher** tier only

Q9.

Factorise fully $12t + 4t^3$

(Total 2 marks)

Q10.

Factorise fully $9y^3 - 6y$

(Total 2 marks)

Q11.

Which of these is a factor of

$x - 1$

$x^2 - 5x$

$-5x$

$x - 5$

$5x$

(Total 1 mark)