

Algebraic Fractions

Difficulty: Easy

Question Paper 1

Level	IGCSE
Subject	Maths (0580/0980)
Exam Board	CIE
Topic	Algebra and graphs
Sub-Topic	Algebraic Fractions
Paper	Paper 2
Difficulty	Easy
Booklet	Question Paper 1

Time allowed: 48 minutes

Score: /37

Percentage: /100

Grade Boundaries:

CIE IGCSE Maths (0580)

A*	A	B	C	D	E
>88%	76%	63%	51%	40%	30%

CIE IGCSE Maths (0980)

9	8	7	6	5	4	3
>94%	85%	77%	67%	57%	47%	35%

Question 1

Write as a single fraction in its simplest form.

$$\frac{2x-1}{3} - \frac{2}{x+1} \quad [3]$$

Question 2

Simplify. $\frac{x^2 - 16}{x^2 - 3x - 4}$ [4]

Question 3

Write as a single fraction in its simplest form.

$$\frac{3}{x+2} - \frac{4}{2x-5}$$

[3]

Question 4

(a) Write as a single fraction in its simplest form.

$$\frac{3}{2x-1} - \frac{1}{x+2} \quad [3]$$

(b) Simplify.

$$\frac{4x^2 - 16x}{2x^2 + 6x - 56} \quad [4]$$

Question 5

Write as a single fraction, in its simplest form.

[4]

$$\frac{3}{2x} + \frac{2x}{3} + 3 + 2x$$

Question 6

Write as a single fraction in its simplest form.

$$\frac{2}{x} - \frac{2}{x+1}$$

[3]

Question 7

Solve the equation.

$$\frac{3}{2x} + \frac{1}{x+1} = 0 \quad [3]$$

Question 8

Simplify.

$$\frac{x^2 + 6x - 7}{3x + 21} \quad [4]$$

Question 9

(a) Factorise $x^2 + x - 30$. [2]

(b) Simplify $\frac{(x - 5)(x + 4)}{x^2 + x - 30}$. [1]

Question 10

Write as a single fraction in its simplest form.

$$\frac{2}{x+3} + \frac{3}{x+2} \quad [3]$$