teachably

GCSE Mathematics

Quadratic Graphs Practice

Mark Scheme - Foundation/Higher, Grade 5-7

M = method mark, A = accuracy mark (dependent on the preceding M mark), B = independent mark.

Edexcel-style questions

Q1 Grade 5 Edexcel style

Total: 3

Part	Mark scheme	Marks
(a)	y = 6, y = 2, y = 11	B3

Q2 Grade 5 Edexcel style

Total: 2

Part	Mark scheme	Marks
(a)	x = 3 gives y = 5	M1
(a)	x = -1 gives y = -3	A1

Q3 Grade 5 Edexcel style

Total: 2

Part	Mark scheme	Marks
(a)	roots: x = 0 and x = 4	M1
(a)	turning point: (2, -4)	A1

Q4 Grade 6 Edexcel style

Total: 2

Part	Mark scheme	Marks
(a)	(x - 2)(x - 3) = 0	M1
(a)	x = 2 and x = 3	A1

Q5 Grade 7 Edexcel style

Total: 2

Part	Mark scheme	Marks
(a)	$(x - 3)^2 - 4$	M1
(a)	(3, -4)	A1

AQA-style questions

Q6 Grade 5 AQA style

Total: 3

Part	Mark scheme	Marks
(a)	y = 4, y = -2, y = 4	B3

Q7 Grade 5 AQA style

Total: 2

Part	Mark scheme	Marks
(a)	x = 4 gives y = 5	M1
(a)	x = 0 gives y = -3	A1

Q8 Grade 5 AQA style

Total: 2

Part	Mark scheme	Marks
(a)	roots: x = -2 and x = 4	M1
(a)	turning point: (1, -9)	A1

Q9 Grade 6 AQA style

Total: 2

Part	Mark scheme	Marks
(a)	(x + 5)(x - 2) = 0	M1
(a)	x = -5 and x = 2	A1

Q10 Grade 7 AQA style

Total: 2

Part	Mark scheme	Marks
(a)	$(x + 2)^2 - 3$	M1
(a)	(-2, -3)	A1

OCR-style questions

Q11 Grade 5 OCR style

Total: 3

Part	Mark scheme	Marks
(a)	y = 3, y = -5, y = 3	B3

Q12 Grade 5 OCR style

Total: 2

Part	Mark scheme	Marks
(a)	x = 3 gives y = 10	M1
(a)	x = -1 gives y = -6	A1

Q13 Grade 5 OCR style

Total: 2

Part	Mark scheme	Marks
(a)	roots: x = 2 and x = 4	M1
(a)	turning point: (3, -1)	A1

Q14 Grade 6 OCR style

Total: 2

Part	Mark scheme	Marks
(a)	(x - 4)(x + 3) = 0	M1
(a)	x = 4 and x = -3	A1

Q15 Grade 7 OCR style

Total: 2

Part	Mark scheme	Marks
(a)	$(x - 4)^2 - 6$	M1
(a)	(4, -6)	A1

Teachably-style questions

Q16 Grade 5 Teachably style — Total: 3

Part	Mark scheme	Marks
(a)	y = 0, y = -6, y = 0	B3

Q17 Grade 5 Teachably style — Total: 2

Part	Mark scheme	Marks
(a)	x = 2 gives y = 5	M1
(a)	x = -2 gives y = -3	A1

Q18 Grade 5 Teachably style — Total: 2

Part	Mark scheme	Marks
(a)	roots: x = -4 and x = 0	M1
(a)	turning point: (-2, -4)	A1

Q19 Grade 6 Teachably style — Total: 2

Part	Mark scheme	Marks
(a)	(x + 3)(x + 4) = 0	M1
(a)	x = -3 and x = -4	A1

Q20 Grade 7 Teachably style — Total: 2

Part	Mark scheme	Marks
(a)	$(x + 1)^2 - 6$	M1
(a)	(-1, -6)	A1

END OF PAPER