QLD Y10 Sketching Parabolas Using The Quadratic Formula Revision Quiz 1

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Question 1 PARABOLAS AND OTHER GRAPHS SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks: i (1) ii (1) iii (1)**

Use the discriminant to determine the number of intercepts for the following parabolas

i) $y = x^2 + 6x + 8$
ii) $y = x^2 + 6x + 9$
iii) $y = x^2 + 6x + 10$

i ○
ii ○
iii ○

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Question 2 PARABOLAS AND OTHER GRAPHS SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (2)**

Determine the turning point (vertex) of the parabola $y = 2x^2 - 4x + 5$

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Question 3 PARABOLAS AND OTHER GRAPHS SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (2)**

Determine the coordinates of the x-intercepts (in exact form) for the parabola
$y = x^2 + 4x - 1$

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Question 4 PARABOLAS AND OTHER GRAPHS SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (3)**

Sketch the graph of $y = 2x^2 - 3x - 2$ using the vertex and the y intercept.

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Question 5 PARABOLAS AND OTHER GRAPHS SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (3)**

Sketch the graph of $y = -x^2 + 2x + 4$ using the vertex and the y intercept.

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Question 6 PARABOLAS AND OTHER GRAPHS > SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks: i (1) ii (1) iii (1)**

Use the discriminant to determine the number of intercepts for the following parabolas

i) $y = x^2 + 6x + 8$
ii) $y = x^2 + 6x + 9$
iii) $y = x^2 + 6x + 10$

i ○
ii ○
iii ○

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Question 7 PARABOLAS AND OTHER GRAPHS > SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (2)**

Determine the turning point (vertex) of the parabola $y = 2x^2 - 4x + 5$

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Question 8 PARABOLAS AND OTHER GRAPHS > SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (2)**

Determine the coordinates of the x-intercepts (in exact form) for the parabola $y = x^2 + 4x - 1$

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Question 9 PARABOLAS AND OTHER GRAPHS ⎍ SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (3)**

Sketch the graph of $y = 2x^2 - 3x - 2$ using the vertex and the y intercept.

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Question 10 PARABOLAS AND OTHER GRAPHS ⎍ SKETCHING PARABOLAS USING THE QUADRATIC FORMULA **Marks (3)**

Sketch the graph of $y = -x^2 + 2x + 4$ using the vertex and the y intercept.

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