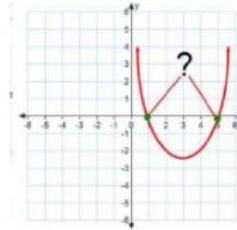


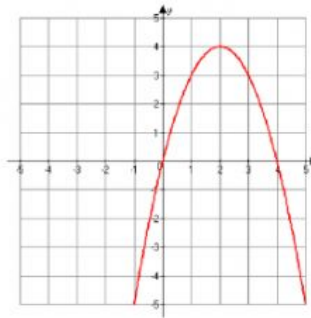
Multiple Choice. Read each statement carefully and select the letter of the correct answer. Be sure that you have not missed any items before clicking the 'Submit' button.

- What is the axis of symmetry?
 - the slope of the graph
 - the dividing line for a parabola
 - a way to spin my pencil
 - the x-axis
- What do you call a "U" shaped curve graph of a quadratic function?
 - parable
 - parabola
 - Cartesian plane
 - radical
- What are the green dots called?
 - axis of symmetry
 - parabola
 - vertex
 - roots/ x-intercepts



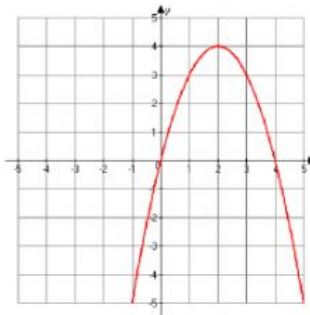
- Solve the inequality $4x^2 - 20x + 24 < 0$
 - $x < -3$ or $x > -2$
 - $2 < x < 3$
 - $x < 2$ or $x > 3$
 - $-3 < x < -2$
- What is the discriminant of a quadratic equation $ax^2 + bx + c = 0$?
 - $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
 - $\sqrt{b^2 - 4ac}$
 - $b^2 - 4ac$
 - $b^2 + 4ac$
- Which of these equations has two real roots?
 - $x^2 - 4x + 4 = 0$
 - $x^2 - x + 5 = 0$
 - $x^2 - 10x + 100 = 0$
 - $x^2 - 4x + 3 = 0$
- If a quadratic equation has no real roots, what would be the value of the discriminant?
 - 3
 - 0
 - 1
 - 3
- Solve the quadratic equation by quadratic formula: $x^2 + x - 2 = 0$
 - 4, -5
 - 2, -4
 - 2, -1
 - 1, -2
- Solve the quadratic equation by completing the square: $x^2 + 10x + 22 = 0$
 - $5 \pm 2\sqrt{7}$
 - $-5 \pm \sqrt{3}$
 - $100 \pm \sqrt{3}$
 - $-10 \pm 2\sqrt{7}$
- How many solutions does the quadratic equation have?
 - 0
 - 1
 - 2
 - 3
- Which answer describes the function $y = -3x^2 + 7x - 2$ accurately?
 - opens up with a minimum
 - opens down with a maximum
 - opens up with maximum
 - opens down with a minimum
- What are the x-intercepts?

- A. 0 and 2
- B. 2 and 3
- C. -4 and 0
- D. 0 and 4



13. Identify the vertex and the y-intercept of the graph of the function $y = 2(x + 2)^2 - 2$.
- | | |
|--|---------------------------------------|
| A. vertex: (2, 2);
y-intercept: 8 | C. vertex: (2, -2);
y-intercept: 6 |
| B. vertex: (-2, -2);
y-intercept: 6 | D. vertex: (-2, 2);
y-intercept: 2 |

14. Does this graph have a maximum or minimum value?
- A. maximum
 - B. minimum
 - C. neither
 - D. both



15. What is the y-intercept of $(x) = 2x^2 + 4x + 6$?
- | | |
|------------|------------|
| A. (6, 0) | C. (-6, 0) |
| B. (0, -6) | D. (0, 6) |