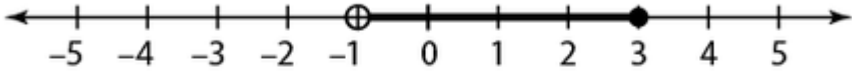


Question Number	Snip of Question
1	<p>What is the value of x in this equation?</p> $5x - 2(2x - 1) = 6$ <p> <input type="radio"/> A. 3 <input type="radio"/> B. 4 <input type="radio"/> C. 7 <input type="radio"/> D. 8 </p>
2	<p>How many solutions are there to this equation?</p> $7x - 3(x - 1) = 2(2x + 3)$ <p> <input type="radio"/> A. no solution <input type="radio"/> B. exactly one solution <input type="radio"/> C. at least two solutions <input type="radio"/> D. infinitely many solutions </p>
3	<p>Which equation matches the graph?</p> <div data-bbox="207 1283 727 1801"> </div> <p> <input type="radio"/> A. $y = 3x - 8$ <input type="radio"/> B. $y = -2x + 1$ <input type="radio"/> C. $y = -4x - 1$ <input type="radio"/> D. $y = 2x - 5$ </p>

4	<p>Select the compound inequality shown on the graph.</p>  <p> <input type="radio"/> A. $x > -1$ and $x \leq 4$, or $-1 < x \leq 4$ <input type="radio"/> B. $x > -1$ and $x \leq 2$, or $-1 < x \leq 2$ <input type="radio"/> C. $x > -1$ and $x \leq 3$, or $-1 < x \leq 3$ <input type="radio"/> D. $x > -1$ and $x \leq 5$, or $-1 < x \leq 5$ </p>
5	<p>Find the solution to the system of equations.</p> $4x - 3y = -1$ $3x - 9y = 33$ <p>solution = (<input type="text"/>)</p> <p>Choices for solution:</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px 10px;">-4, 5</div> <div style="border: 1px solid black; padding: 2px 10px;">-4, -5</div> <div style="border: 1px solid black; padding: 2px 10px;">4, -5</div> <div style="border: 1px solid black; padding: 2px 10px;">4, 5</div> </div>
6	<p>Simplify: $(-2x - 3) - (3x^2 - 8x + 9)$. Choose the standard form of the answer.</p> <p> <input type="radio"/> A. $-3x^2 - 6x - 12$ <input type="radio"/> B. $-3x^2 - 9x + 12$ <input type="radio"/> C. $-3x^2 + 6x - 12$ <input type="radio"/> D. $-3x^2 - 6x + 12$ </p>
7	<p>What is the product of $(7x^2 - 3)(8x^2 - 7x + 5)$?</p> <p> <input type="radio"/> A. $56x^4 - 50x^3 + 11x^2 - 21x - 15$ <input type="radio"/> B. $56x^4 - 49x^3 + 13x^2 + 21x + 15$ <input type="radio"/> C. $56x^4 - 49x^3 + 11x^2 + 21x - 15$ <input type="radio"/> D. $56x^4 - 49x^3 - 13x^2 - 21x - 15$ </p>

8	<p>What is the product of $(3y - 5)(3y + 5)$?</p> <p><input type="radio"/> A. $16x^2 + 7$</p> <p><input type="radio"/> B. $9y^2 - 25$</p> <p><input type="radio"/> C. $16x^2 - 7$</p> <p><input type="radio"/> D. $9y^2 + 25$</p>
9	<p><input type="text"/> and $15ab^3$ have a GCF of $5ab^2$. Fill in the blank.</p> <p><input type="radio"/> A. $30ab^2$</p> <p><input type="radio"/> B. $30a^2b^5$</p> <p><input type="radio"/> C. $25ab$</p> <p><input type="radio"/> D. $5ab^2$</p>
10	<p>What is the factored form of $x^2 - x - 20$?</p> <p><input type="radio"/> A. $(x - 5)(x - 4)$</p> <p><input type="radio"/> B. $(x - 5)(x + 4)$</p> <p><input type="radio"/> C. $x(x + 4) - 5(x + 4)$</p> <p><input type="radio"/> D. $x(x - 1) - 20$</p>
11	<p>Factor $10y^2 + 54y - 36$ <u>completely</u>.</p> <p><input type="radio"/> A. $2(y - 6)(5y + 3)$</p> <p><input type="radio"/> B. $(2y + 12)(5y - 3)$</p> <p><input type="radio"/> C. $2y(5y + 27) - 36$</p> <p><input type="radio"/> D. $2(y + 6)(5y - 3)$</p>

12	<p>Factor the perfect square trinomial $4x^2 - 20x + 25$.</p> <p><input type="radio"/> A. $(2x - 5)(2x + 10)$</p> <p><input type="radio"/> B. $(2x - 5)^2$</p> <p><input type="radio"/> C. $(2x - 5)(2x + 5)$</p> <p><input type="radio"/> D. $(2x + 5)^2$</p>												
13	<p>What is the vertex of the function $f(x) = 3(x - 4)^2 + 5$?</p> <p>vertex: (<input type="text"/> , <input type="text"/>)</p> <p>Choices for boxes.</p> <table><tr><td><input type="text" value="-4"/></td><td>,</td><td><input type="text" value="5"/></td><td><input type="text" value="-4"/></td><td>,</td><td><input type="text" value="-5"/></td><td><input type="text" value="4"/></td><td>,</td><td><input type="text" value="-5"/></td><td><input type="text" value="4"/></td><td>,</td><td><input type="text" value="5"/></td></tr></table>	<input type="text" value="-4"/>	,	<input type="text" value="5"/>	<input type="text" value="-4"/>	,	<input type="text" value="-5"/>	<input type="text" value="4"/>	,	<input type="text" value="-5"/>	<input type="text" value="4"/>	,	<input type="text" value="5"/>
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14	<p>The function $h(t) = -16t^2 + 40t$ models the height, in feet, of a ball t seconds after it is thrown into the air. What is the maximum height the ball reaches after it is thrown?</p> <p><input type="radio"/> A. 25 ft</p> <p><input type="radio"/> B. 27 ft</p> <p><input type="radio"/> C. 50 ft</p> <p><input type="radio"/> D. 75 ft</p>												
15	<p>What are the solutions to $x^2 + 2x - 8 = 0$?</p> <p><input type="radio"/> A. 0, 2</p> <p><input type="radio"/> B. 2, -4</p> <p><input type="radio"/> C. -2, 4</p> <p><input type="radio"/> D. 2, 4</p>												
16	<p>Which is equivalent to $\left(3\sqrt{12x^5}\right)\left(4\sqrt{12x^3}\right)$?</p> <p><input type="radio"/> A. $144x^8$</p> <p><input type="radio"/> B. $144x^4$</p> <p><input type="radio"/> C. $24x^8$</p> <p><input type="radio"/> D. $12x^4$</p>												

17	<p>Which are the solutions of $3x^2 - 2x - 5 = 0$ by factoring?</p> <p><input type="radio"/> A. $-5, \frac{1}{3}$</p> <p><input type="radio"/> B. $-1, \frac{5}{3}$</p> <p><input type="radio"/> C. $-1, -\frac{5}{3}$</p> <p><input type="radio"/> D. $5, \frac{1}{3}$</p>
18	<p>Use the Quadratic Formula to solve $2x^2 + 3x = 4$. Which of the following are the solutions to the nearest hundredth?</p> <p><input type="radio"/> A. 2.35 and 0.85</p> <p><input type="radio"/> B. 2.35 and -0.85</p> <p><input type="radio"/> C. -2.35 and 0.85</p> <p><input type="radio"/> D. -2.35 and -0.85</p>
19	<p>What are the coordinates of the vertex (h, k) of the graph of $y = x^2 + 14x + 33$?</p> <p><input type="radio"/> A. (-16, 7)</p> <p><input type="radio"/> B. (16, -7)</p> <p><input type="radio"/> C. (7, -16)</p> <p><input type="radio"/> D. (-7, -16)</p>
20	<p>Which is an expression for $\sqrt{175}$ without a perfect square factor in the radicand?</p> <p><input type="radio"/> A. $\sqrt{70}$</p> <p><input type="radio"/> B. $5\sqrt{7}$</p> <p><input type="radio"/> C. $5\sqrt{10}$</p> <p><input type="radio"/> D. $28\sqrt{5}$</p>