



## Why Doesn't Gyro Bet on Even Numbers When Playing Roulette?



Factor completely each polynomial below. Find your answer and notice the two letters next to it. Write these letters in the two boxes at the bottom of the page that contain the number of that exercise.

<p>① <math>3x^2 - 75</math></p> <p>② <math>5x^2 + 30x + 45</math></p> <p>③ <math>x^3 - 49x</math></p> <p>④ <math>2x^2 - 24x + 72</math></p>	<p>LO <math>5(x - 4)^2</math></p> <p>EL <math>2(x - 12)^2</math></p> <p>HE <math>3(x + 5)(x - 5)</math></p> <p>EA <math>x(x + 8)(x - 8)</math></p>	<p>SF <math>5(x + 3)^2</math></p> <p>NT <math>2(x - 6)^2</math></p> <p>CH <math>3(x + 2)(x - 2)</math></p> <p>ST <math>x(x + 7)(x - 7)</math></p>																								
<p>⑤ <math>2k^3 - 8k</math></p> <p>⑥ <math>54k^2 - 24</math></p> <p>⑦ <math>5k^3 + 100k^2 + 500k</math></p> <p>⑧ <math>12k^2 - 36k + 27</math></p>	<p>HI <math>5k(k + 10)^2</math></p> <p>EN <math>3(k - 2)^2</math></p> <p>SO <math>2k(k + 4)(k - 4)</math></p> <p>DS <math>6(3k + 2)(3k - 2)</math></p>	<p>HE <math>2k(k + 2)(k - 2)</math></p> <p>LS <math>6(3k + 1)(3k - 1)</math></p> <p>OR <math>3(2k - 3)^2</math></p> <p>TE <math>5k(k + 8)^2</math></p>																								
<p>⑨ <math>7a^3b - 7ab^3</math></p> <p>⑩ <math>32a^2b^2 + 16ab^2 + 2b^2</math></p> <p>⑪ <math>4a^3b - 40a^2b^2 + 100ab^3</math></p> <p>⑫ <math>4a^4b^3 - a^2b</math></p>	<p>MI <math>7ab(a + 2b)^2</math></p> <p>LA <math>4ab(a - 3b)^2</math></p> <p>OD <math>a^2b(2ab + 1)(2ab - 1)</math></p> <p>WA <math>7ab(a + b)(a - b)</math></p>	<p>AT <math>2b^2(2a + 4)^2</math></p> <p>AV <math>4ab(a - 5b)^2</math></p> <p>MA <math>a^2b(ab + 2)(ab - 2)</math></p> <p>IN <math>2b^2(4a + 1)^2</math></p>																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 20px; height: 20px; text-align: center;">5</td> <td style="width: 20px; height: 20px; text-align: center;">5</td> <td style="width: 20px; height: 20px; text-align: center;">9</td> <td style="width: 20px; height: 20px; text-align: center;">9</td> <td style="width: 20px; height: 20px; text-align: center;">4</td> <td style="width: 20px; height: 20px; text-align: center;">4</td> <td style="width: 20px; height: 20px; text-align: center;">3</td> <td style="width: 20px; height: 20px; text-align: center;">3</td> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td style="width: 20px; height: 20px; text-align: center;">12</td> <td style="width: 20px; height: 20px; text-align: center;">12</td> <td style="width: 20px; height: 20px; text-align: center;">6</td> <td style="width: 20px; height: 20px; text-align: center;">6</td> <td style="width: 20px; height: 20px; text-align: center;">10</td> <td style="width: 20px; height: 20px; text-align: center;">10</td> <td style="width: 20px; height: 20px; text-align: center;">7</td> <td style="width: 20px; height: 20px; text-align: center;">7</td> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td style="width: 20px; height: 20px; text-align: center;">11</td> <td style="width: 20px; height: 20px; text-align: center;">11</td> <td style="width: 20px; height: 20px; text-align: center;">8</td> <td style="width: 20px; height: 20px; text-align: center;">8</td> </tr> </tbody> </table>	5	5	9	9	4	4	3	3	1	1	12	12	6	6	10	10	7	7	2	2	11	11	8	8		
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