

## Factoring Polynomials-Level 2

No Calculator

<ol style="list-style-type: none"><li>1. <math>(x^3)((x^2) + 2) = 24x</math>, What are the two possible values of <math>X^2</math> ?</li><li>2. <math>(x^3)((x^2) - 4) = 12x</math>, What are the two possible values of <math>X^2</math> ?</li><li>3. <math>(x^3)((x^2) - 14) = -49x</math>, What are the two possible values of <math>X^2</math> ?</li><li>4. <math>(x^3)((x^2) - 1) = 30x</math>, What are the two possible values of <math>X^2</math> ?</li><li>5. <math>(x^3)((x^2) - 2) = 35x</math>, What are the two possible values of <math>X^2</math> ?</li><li>6. <math>(x^3)((x^2) + 3) = -2x</math>, What are the two possible values of <math>X^2</math> ?</li><li>7. <math>(x^3)((x^2) - 12) = -36x</math>, What are the two possible values of <math>X^2</math> ?</li><li>8. <math>(x^3)((x^2) + 1) = 42x</math>, What are the two possible values of <math>X^2</math> ?</li><li>9. <math>(x^3)((x^2) - 4) = -4x</math>, What are the two possible values of <math>X^2</math> ?</li><li>10. <math>(x^3)((x^2) - 2) = -x</math>, What are the two possible values of <math>X^2</math> ?</li><li>11. <math>(x^3)((x^2) + 4) = 5x</math>, What are the two possible values of <math>X^2</math> ?</li><li>12. <math>(x^3)((x^2) - 2) = -x</math>, What are the two possible values of <math>X^2</math> ?</li><li>13. <math>(x^3)((x^2) - 5) = -4x</math>, What are the two possible values of <math>X^2</math> ?</li><li>14. <math>(x^3)((x^2) - 1) = 30x</math>, What are the two possible values of <math>X^2</math> ?</li><li>15. <math>(x^3)((x^2) - 9) = -18x</math>, What are the two possible values of <math>X^2</math> ?</li><li>16. <math>(x^3)((x^2) - 6) = 7x</math>, What are the two possible values of <math>X^2</math> ?</li><li>17. <math>(x^3)((x^2) + 2) = 15x</math>, What are the two possible values of <math>X^2</math> ?</li><li>18. <math>(x^3)((x^2) - 4) = 12x</math>, What are the two possible values of <math>X^2</math> ?</li><li>19. <math>(x^3)((x^2) - 4) = 21x</math>, What are the two possible values of <math>X^2</math> ?</li><li>20. <math>(x^3)((x^2) - 2) = 15x</math>, What are the two possible values of <math>X^2</math> ?</li></ol>	<p>What are the real possible values of x:</p> <ol style="list-style-type: none"><li>1. <math>x^3 - 4x^2 + 2x - 8 = 0</math></li><li>2. <math>x^3 - 2x^2 + 5x - 10 = 0</math></li><li>3. <math>x^3 - 7x^2 - 3x + 21 = 0</math></li><li>4. <math>x^3 - 7x^2 - 2x + 14 = 0</math></li><li>5. <math>x^3 + 4x^2 + 4x + 16 = 0</math></li><li>6. <math>x^3 + 5x^2 + 5x + 25 = 0</math></li><li>7. <math>x^3 - 2x^2 + 4x - 8 = 0</math></li><li>8. <math>x^3 + x^2 + x + 1 = 0</math></li><li>9. <math>x^3 + 5x^2 - x - 5 = 0</math></li><li>10. <math>x^3 + 7x^2 + 2x + 14 = 0</math></li><li>11. <math>x^3 + x^2 + 7x + 7 = 0</math></li><li>12. <math>x^3 + 7x^2 + 4x + 28 = 0</math></li><li>13. <math>x^3 + x^2 + 4x + 4 = 0</math></li><li>14. <math>x^3 + 7x^2 - 5x - 35 = 0</math></li><li>15. <math>x^3 - x^2 + 6x - 6 = 0</math></li><li>16. <math>x^3 + 4x^2 + 7x + 28 = 0</math></li><li>17. <math>x^3 + 6x^2 + x + 6 = 0</math></li><li>18. <math>x^3 + 2x^2 + 2x + 4 = 0</math></li><li>19. <math>x^3 + x^2 + 2x + 2 = 0</math></li><li>20. <math>x^3 - 6x^2 - 6x + 36 = 0</math></li></ol>
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1. $x = -6, x = 4$	1. $x = 4$
2. $x = -2, x = 6$	2. $x = 2$
3. $x = 7, x = -7$	3. $x = 7, x = \sqrt{3}$
4. $x = 6, x = -5$	4. $x = 7, x = \sqrt{2}$
5. $x = 7, x = -5$	5. $x = -4$
6. $x = -2, x = -1$	6. $x = -5$
7. $x = 6, x = -6$	7. $x = 2$
8. $x = -7, x = 6$	8. $x = -1$
9. $x = 2, x = -2$	9. $x = -5, x = 1$
10. $x = 1, x = -1$	10. $x = -7$
11. $x = 1, x = -5$	11. $x = -1$
12. $x = 1, x = 1$	12. $x = -7$
13. $x = 1, x = 4$	13. $x = -1$
14. $x = -5, x = 6$	14. $x = -7, x = \sqrt{5}$
15. $x = 6, x = 3$	15. $x = 1$
16. $x = 7, x = -1$	16. $x = -4$
17. $x = -5, x = 3$	17. $x = -6$
18. $x = -2, x = 6$	18. $x = -2$
19. $x = 7, x = -3$	19. $x = -1$
20. $x = 5, x = -3$	20. $x = 6, x = \sqrt{6}$