

Factor each expression, then solve each equation containing the expression.

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|--------------------------|--------------------------|
| 1. $36 - 49x^2$ | $36 - 49x^2 = 0$ |
| 2. $x^3 + 3x^2 - 10x$ | $x^3 + 3x^2 - 10x = 0$ |
| 3. $x^2 + 3x - 40$ | $x^2 + 3x - 40 = 0$ |
| 4. $x^2 + 22x + 117$ | $x^2 + 22x + 117 = 0$ |
| 5. $x^2 - 10x + 24$ | $x^2 - 10x + 24 = 0$ |
| 6. $2x^3 - 8x$ | $2x^3 - 8x = 0$ |
| 7. $x^2 + 11x + 28$ | $x^2 + 11x + 28 = 0$ |
| 8. $64x^2 - 1$ | $64x^2 - 1 = 0$ |
| 9. $-3x^2 + 12x + 15$ | $-3x^2 + 12x + 15 = 0$ |
| 10. $5x^2 + 6x - 11$ | $5x^2 + 6x - 11 = 0$ |
| 11. $10x^2 - 250$ | $10x^2 - 250 = 0$ |
| 12. $6x^3 - 12x^2 - 48x$ | $6x^3 - 12x^2 - 48x = 0$ |
| 13. $18x + 30x^2$ | $18x + 30x^2 = 0$ |
| 14. $x^2 - 256$ | $x^2 - 256 = 0$ |
| 15. $17x^2 + 2x - 15$ | $17x^2 + 2x - 15 = 0$ |
| 16. $6x^2 - 96x + 384$ | $6x^2 - 96x + 384 = 0$ |
| 17. $9x^2 - 400$ | $9x^2 - 400 = 0$ |
| 18. $x^3 - 5x^2$ | $x^3 - 5x^2 = 0$ |
| 19. $2x^2 + 7x$ | $2x^2 + 7x = 0$ |
| 20. $16x^2 - 121$ | $16x^2 - 121 = 0$ |