

NCLS Math 7 Homework

Name: _____

2/5/2012

the equation.

Use the zero-product property to solve

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|---|----------------------------|---|
| 19. $(x + 4)(x + 1) = 0$ | 20. $(y + 3)^2 = 0$ | 21. $(t + 8)(t - 6) = 0$ |
| 22. $(w - 17)^2 = 0$ | 23. $(b - 9)(b + 8) = 0$ | 24. $(d + 7)^2 = 0$ |
| 25. $(y - 2)(y + 1) = 0$ | 26. $(z + 2)(z + 3) = 0$ | 27. $(v - 7)(v - 5) = 0$ |
| 28. $\left(t + \frac{1}{2}\right)(t - 4) = 0$ | 29. $4(c + 9)^2 = 0$ | 30. $(u - 3)\left(u - \frac{2}{3}\right) = 0$ |
| 31. $(y - 5.6)^2 = 0$ | 32. $(a - 40)(a + 12) = 0$ | 33. $7(b - 5)^3 = 0$ |

Solve the equation:

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|---|--|
| 34. $(4x - 8)(7x + 21) = 0$ | 35. $(2d + 8)(3d + 12) = 0$ |
| 36. $5(3m + 9)(5m - 15) = 0$ | 37. $8(9n + 27)(6n - 9) = 0$ |
| 38. $(6b - 18)(2b + 2)(2b + 2) = 0$ | 39. $(4y - 5)(2y - 6)(3y - 4) = 0$ |
| 40. $(x + 44)(3x - 2)^2 = 0$ | 41. $(5x - 9.5)^2(3x + 6.3) = 0$ |
| 42. $\left(\frac{1}{2}x + 2\right)\left(\frac{2}{3}x + 6\right)\left(\frac{1}{6}x - 1\right) = 0$ | 43. $\left(2n - \frac{1}{4}\right)\left(5n + \frac{3}{10}\right)\left(3n - \frac{2}{3}\right) = 0$ |

Factor the trinomial.

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|------------------------|-----------------------|-----------------------|
| 15. $x^2 + 8x - 9$ | 16. $t^2 - 10t + 21$ | 17. $b^2 + 5b - 24$ |
| 18. $w^2 + 13w + 36$ | 19. $y^2 - 3y - 18$ | 20. $c^2 + 14c + 40$ |
| 21. $m^2 - 7m - 30$ | 22. $32 + 12n + n^2$ | 23. $44 - 15s + s^2$ |
| 24. $z^2 + 65z + 1000$ | 25. $x^2 - 45x + 450$ | 26. $d^2 - 33d - 280$ |

Solving Quadratic Equations **Solve the equation by factoring.**

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|-------------------------|--------------------------|--------------------------|
| 27. $x^2 + 7x + 10 = 0$ | 28. $x^2 + 5x - 14 = 0$ | 29. $x^2 - 9x = -14$ |
| 30. $x^2 + 32x = -220$ | 31. $x^2 + 16x = -15$ | 32. $x^2 + 3x = 54$ |
| 33. $x^2 + 8x = 65$ | 34. $-x + x^2 = 56$ | 35. $x^2 - 20x = -51$ |
| 36. $x^2 - 5x = 84$ | 37. $x^2 + 3x - 31 = -3$ | 38. $x^2 - 2x - 19 = -4$ |
| 39. $x^2 - x - 8 = 82$ | 40. $x^2 + 42 = 13x$ | 41. $x^2 - 9x + 18 = 2x$ |