

Name: _____

Solving Equations by Factoring

1) Solve each equation. Check your solution.

1) $2r(r + 4) = 0$

2) $4k(k - 5) = 0$

3) $(s + 4)(s - 3) = 0$

4) $(m - 4)(m + 5) = 0$

5) $(3x - 4)(x + 2) = 0$

6) $(2y + 2)(2y - 4) = 0$

7) $(t + 2)(6t + 1) = 0$

8) $(y - 9)(2y + 5) = 0$

9) $(x^2 + 242)(4x - 9) = 0$

10) $(r^2 + 169)(r + 121) = 0$

11) $(w + 8)(w - 2) = 0$

12) $(x - 4)(2x - 8) = 0$

13) $(4t - 64)(t - 81) = 0$

14) $(x - 1)(2x + 8) = 0$

2) Solve the following equations by factoring if possible.

1) $x^2 - 10x + 21 = 0$

2) $x^2 + 13x + 40 = 0$

3) $x^2 + 8x + 12 = 0$

4) $x^2 + 14x = 72$

5) $x(x - 2) = 35$

6) $x(x + 8) = 20$

7) $x^2 - 6x - 40 = 0$

8) $x^2 - 60 = 11x$

9) $2x^2 - 7x - 15 = 0$

10) $3x^2 - 7x + 4 = 0$

11) $6x^2 + 17x = -12$

12) $10x^2 - 7x = 6$

13) $8x^2 - 6x - 5 = 0$

14) $3x^2 - 5x = -2$

15) $4x^2 - 9 = 0$

16) $36x^2 - 25 = 0$