

Solving Equations Using Factoring

a) Factored form:

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

b) Removing Common Factor:

1. $x^2 + 4x = 0$ 2. $4x^2 - 12x = 0$ 3. $x(x - 1) + 9(x - 1) = 0$

c) Difference of Squares:

1. $x^2 - 25 = 0$ 2. $x^2 - 81 = 0$ 3. $x^2 - 169 = 0$
4. $4x^2 - 25 = 0$ 5. $36 - x^2 = 0$ 6. $144 - 81x^2 = 0$
7. $3x^2 - 12 = 0$ 8. $5x^2 - 45 = 0$

d) Easy Type 1

1. $x^2 + 7x + 12 = 0$ 2. $x^2 + 15x + 16 = 0$ 3. $x^2 + 15x + 56 = 0$
4. $x^2 + 14x = -40$ 5. $3x^2 + 60x + 225 = 0$

e) Easy Type 2

1. $x^2 - 12x + 13 = 0$ 2. $x^2 - 15x + 14 = 0$ 3. $x^2 - 9x - 18 = 0$
4. $x^2 - 13x = -30$ 5. $4x^2 - 20x = -16$

f) Easy Type 3

1. $x^2 + 5x - 6 = 0$ 2. $x^2 + 8x - 48 = 0$ 3. $x^2 + 3x - 54 = 0$
4. $x^2 + 6x = 40$ 5. $3x^2 + 15x - 16 = 0$

g) Easy Type 4

1. $x^2 - 7x - 8 = 0$ 2. $x^2 - 12x - 28 = 0$ 3. $x^2 - 5x - 36 = 0$
4. $x^2 - 3x = 88$ 5. $-4x^2 + 8x + 252 = 0$