**Solving Quadratic Inequalities RED**

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| **Solution of quadratic equation** | **Graph showing inequality region** | **Solution of inequality** |
| (x + 4)(x – 7) = 0x = -4, x = 7 |  | -3 < x < 6 |
| (x + 3)(x + 4) = 0x = -3, x = -4 |  | 5 ≤ x ≤ 7 |
| (5x – 1)(x – 2) = 0x = 1/5, x = 2 |  | 1 < x < 2 |
| (x + 3)(x – 2) = 0x = -3, x = 2 |  | 3 < x < 5 |
| (x – 3)(x – 5) = 0x = 3, x = 5 |  | x < -5x > -1 |
| (x + 5)(x + 1) = 0x = -5, x = -1 |  | x ≤ -3x ≥ 7 |

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| **Solution of quadratic equation** | **Graph showing inequality region** | **Solution of inequality** |
| (x – 7)(x – 5) = 0x = 7, x = 5 |  | -3 ≤ x ≤ 2 |
| (x – 5)(x + 3) = 0x = 5, x = -3 |  | x ≤ -3x ≥ 5 |
| (6 – x)(3 + x) = 0x = 6, x = -3 |  | x ≤ -7x ≥ -3 |
| (x – 2)(x – 1) = 0x = 1, x = 2 |  | x ≤ -4x ≥ -3 |
| (x + 7)(x + 3) = 0x = -7, x = -3 |  | x < -4x > 7 |
| (x – 7)(x + 3) = 0x = 7, x = -3 |  | $\frac{1}{5}$ ≤ x ≤ 2 |