Quadratics - Discriminant

1. The quadratic equation $2x^2 + 5x - k = 0$ has no real solutions. Find the set of possible values of the constant k.

2. The quadratic equation $kx^2 + 4x + 3 = 0$ has two distinct real solutions. Find the set of possible values of k.

3. The quadratic equation $3x^2 - kx + 7 = 0$ has equal roots.

    Find the possible values of k.

4. The quadratic equation $kx^2 + 2x - 5 = 0$ has no real solutions. Find the set of possible values of k.

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5. The quadratic equation $4x^2 + kx + 2 = 0$ has two distince real roots. Find the set of possible values of k.

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6. The quadratic equation $kx^2 + (k-2)x + 1 = 0$ has equal roots. Find the possible values of k.

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7. The quadratic equation $2x^2 - 3kx + 5 = 0$ has no real solutions. Find the set of possible values of k.

8. The quadratic equation $x^2 + 2kx + 9 = 0$ has two distinct real solutions. Find the set of possible values of k.

9. The quadratic equation $(k + 1)x^2 - 6x + 4 = 0$ has equal roots. Find the possible values of k.

10. The quadratic equation $kx^2 + 8x + 2 = 0$ has no real solutions. Find the set of possible values of k.