1. (4 points) Solve by completing the square method: \( 2x^2 - 5x = 7 \)

2. (5 points) Solve by using the quadratic formula: \((3x - 2)(2x - 3) = 27\)
3. Find a quadratic equation with the given solutions below:

(a) (2 points) \(-5\) and \(\frac{1}{2}\)

(b) (2 points) \(4\) and \(\frac{-2}{3}\)

(c) (2 points) \(-5 \pm 3i\)

(d) (2 points) \(2 \pm \sqrt{5}\)

4. (3 points) Use the value of the discriminant to discuss the type of solutions for \(4x^2 = 5x - 8\).
5. (3 points) Use the value of the discriminant to discuss the type of solutions for 
\(9x^2 + 16 = 24x\).

6. (4 points) Solve by making a proper substitution: 
\(x - 3\sqrt{x} - 10 = 0\)

7. (4 points) Solve by making a proper substitution: 
\((x^2 - 4)^2 - 10(x^2 - 4) + 16 = 0\)

8. (4 points) Solve by making a proper substitution: 
\(x^4 - 5x^2 - 36 = 0\)
9. (5 points) Solve by making a proper substitution: \((x - 1)^{2/3} + (x - 1)^{1/3} - 12 = 0\)

10. (5 points) Solve by making a proper substitution: \(6x^{-2} + x^{-1} - 2 = 0\)

11. (5 points) Solve by making a proper substitution: \(12x^4 - 11x^2 + 2 = 0\)