1) Solve the quadratic equation: \(x^2 + 3x - 28 = 0\)

2) Given the following function: \(g(x) = 6x^2 + 5x - 6\)
   a) Find the zeros of the function (use the quadratic formula)
   b) Find the x-coordinate of the vertex

3) Simplify (Reduce to the lowest term): \(\frac{x^2 - 9}{x^2 - 2x - 15}\)

4) Given the following function: \(f(x) = 8x^2 + 6x - 9\)
   a) Determine whether the parabola opens upward or downward. Why?
   b) Find the vertical intercept
5) Solve the following quadratic: \(4x^2 - 9 = 0\)

5) The sides of the larger rectangle is 80m by 60m. If the area of the smaller rectangle is 1800 m\(^2\), find the dimensions of the smaller rectangle.

6) The product of two consecutive odd number is 255. Find the two numbers.