Math 002 Review Practice

21) Rationalize the denominator:

a) $\frac{2}{\sqrt{3}}$ b) $\frac{3}{5+\sqrt{6}}$

22) The diagonal of a square is 8 feet. What is the length of each side?

23) $g(x) = 3x^2 - 30x + 63$

a) Find $g(0)$

b) Find $g(n+1)$

c) What is the vertex of the graph $y = g(x)$?

d) What are the zeros of the function?

24) Solve: $\sqrt{5x+54} = x + 8$ (Identify extraneous solutions)

25) Sketch a graph of the following: $f(x) = -2(x-1)^2 + 4$

Label the vertex and 2 other points.