Chapter 0 Review

1. Write the equation of the line that goes through the point (-1, -2) and is perpendicular to the line 2x - 5y = 6.

2. Solve for x: $3x - 8 \ge 0$.

3. Solve for x: $x^2 + 2x - 8 < 0$

4. Find the domain of $\sqrt{x^2 - 9x + 18}$

5. Solve for x: $4x^2 \le 9$

6. Find the exact values of all six trig functions of θ if $\sec \theta = \frac{4}{3}$

7. Find the exact value of all six trig functions of θ if:

a)
$$\theta = -\frac{13\pi}{6}$$

b)
$$\theta=660^{\circ}$$

8. Solve for x: $\frac{x^3 - 16x}{x + 1} \le 0$

9. Given $f(x) = x^2 + 2x - 1$ and g(x) = x + 3 find:

a)
$$f(g(x))$$

b)
$$g(f(x))$$

10. Using the model h(x) = f(g(x)) and given $h(x) = \frac{2}{(x+3)}$ find:

a)
$$f(x)$$

b)
$$g(x)$$