**Pre-AP Algebra II** **Name: _____**
**Assignment #27** **Period: _____**
**[Due Wednesday 1/15/20]**

**Directions: Find the inverse of the following functions.**
**[Notes #84]**

**1.** $f(x)=\frac{x}{3}+\frac{2}{3}$

**2.** $f(x)=-2(x-2)^3$

**3.** $f(x)=-\sqrt{2x+1}-3$

**4.** $f(x)=-\sqrt{\frac{3}{4}x+\frac{2}{3}}-3$

**5.** $f(x)=\sqrt{(3x-2)^3}+1$

**6.** $f(x)=\frac{3}{4}\left(\frac{2}{3}(x-4)\right)^2-5$

**7.** $f(x)=\frac{5x-3}{7}+2$

**8.** $f(x)=\frac{7\delta x}{3}+\lambda$

**9.** $f(x)=\delta^2(2x+\varphi)^2$

**10.** $f(x)=\delta^2\sqrt{(2x^2+\varphi)}-\frac{\pi}{\theta}$

**Directions: Find the composition of the following functions if** $f(x)=3x-5$, $g(x)=x^2+3$, **and** $h(x)=\sqrt{2x-1}$.

**[Notes #85]**

**11.** $(g\circ g)(3)$

**12.** $(f\circ g)(-4)$

**13.** $(g\circ f)(3x)$

**14.** $(h\circ f)(-5)$

**15.** $(g\circ h)(2x^2)$