Quiz Review

Please do on separate paper.

Use Limit Definition of Derivatives to find the derivative for #1-4.

1. $f(x) = 3x + 7$

2. $g(x) = x^2 - 3x - 10$

3. $h(x) = \sqrt{4x - 3}$

4. $f(x) = \dfrac{2}{x - 6}$

Find the equation of the tangent line to at x = 4 for #5-6. Write the line in slope intercept form.

5. $f(x) = 3x^3 - 4x + 2x^2$

6. $g(x) = -\dfrac{x^4}{2} - 8\sqrt{x}$

Find the derivative of the function at x = -2 for #7.

7. $h(x) = \dfrac{-3}{x^2} - \dfrac{4}{x^4} + 3x^{\frac{5}{3}}$