

# AP Precalculus - M3Y & M3Z

## Inverse Functions & Ranges - Homework 1

1. Find the inverse of the following functions (you do not need to check that they are 1-1):

(i)  $f(x) = \frac{1}{2}x - 9$

(ii)  $g(x) = 2x^3 - 1$

(iii)  $h(x) = \frac{10}{5-x} - 2$

(iv)  $p(x) = \sqrt[5]{3x-7} - 4$

(v)  $q(x) = \frac{8x-6}{1+5x}$

(vi)  $r(x) = x^3 - 6x^2 + 12x - 8$

2. Find the range of the functions from Question 1.