

Name: \_\_\_\_\_

**EE432 Fall 2011 Quiz 6**

1. Using partial fraction expansion, find the inverse ZT of:

$$H(z) = \frac{0.5z(z - 1)}{(z - 0.25)(z + 0.5)}$$

2. Find the first 3 non-zero terms of  $h[n]$  for:

$$H(z) = \frac{2}{z^2 - 0.2z + 1}$$

3. Use your ZT tables to find either the ZT or the inverse ZT for:

$$H(z) = \frac{1.2z}{(z - 0.6)^2} \quad |z| > 0.6$$

$$\sin(0.5\pi(n - 1)) u[n - 1]$$

Bonus: What country has won the most gold medals at Winter Olympic Games?