

MATH1009 – Quiz 4
Wednesday, December 07, 2016
Instructor: Abuzer Yakaryilmaz

Name and surname:

Questions
(20 minutes)

Let $p(x) = x^3 - 7x + 6$ and $q(x) = 4x^2 + 20x + 24$ be two polynomials.

1. (50 points) Find a polynomial $r(x)$ with degree 1 such that $r(x)$ is a common factor of both $p(x)$ and $q(x)$, i.e., $r(x)$ divides both $p(x)$ and $q(x)$ without remainder.
2. (50 points) Find a polynomial $s(x)$ with degree 4 such that both $p(x)$ and $q(x)$ are factors of $s(x)$, i.e., both $p(x)$ and $q(x)$ divide $s(x)$ without remainder.

Show the details of how to follow your answers!