MATH 150 Recitation 2 Extra Problems

1. Find the domain of the expression

$$\frac{x-3}{4x^2-16}.$$

   Give your answer as an interval.

2. Simplify the radical expression:

$$\frac{\sqrt{81x^7y^{16}z^3}}{\sqrt{27x^5z^{11}}}.$$

3. Factor the expression:

$$25x^2y^2 + 70xy + 39.$$

   That is, write it in the form

$$(axy+b)^2 + c$$

   for some constants a, b, and c.

4. Write the complex number in standard form:

$$(3+\sqrt{-7})^2$$