Math 5320, 2/7/18 Name:

Worksheet 11

1. In $\mathbb{Z}[x]$, the ideal $(2x^2 - 4, 4x - 5)$ is not principal. However, this ideal is principal in $R[x]$. What is it generated by?

2. Let $\varphi : R \to S$ be a ring homomorphism. Show that the image of φ, denoted by $\varphi(R)$ is a subring of S.

Check this box if you would like feedback ☐