1. What does it mean for an integral domain to be a Euclidean domain?

2. Divide 1 + 8i by 2 - 4i in Z[i]. Can you find more than one possible quotient and remainder?

3. 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?

Check this box if you would like feedback \square