

MATH 201 HW 6

due **Feb 25** before class.

Staple all your papers. Write carefully, unreadable answers will not receive any credit.

Do the following exercises from Book of Proof:

- [6] 20, 21
- [7] 2, 8, 12, 28

And the following:

1. If $a, b \in \mathbb{N}$, then there exist integers k and l for which $\gcd(a, b) = ak + bl$.
2. Negate the following formula and convert it to prenex normal form after negating

$$\exists x \forall y \left((\exists z R(z, y)) \iff (\forall z P(z, x)) \right).$$