CH 6- Greatest Common Divisor

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Theorem BBD

Info – Bound By Divisibility

 $\forall a, b \in \mathbb{Z}, \text{if } b \mid a \text{ and } a \neq 0, \text{then } b \leq |a|$

Division Algorithm

For all $a \in \mathbb{Z}, b$ in positive integers, there exist unique integers q and r s.t.

$$a = qb + r, \qquad \quad 0 \le r < b$$