Quiz 1

Name: _Key_

(1) Define n is an **even** integer.

$n = 2k$ for some $k \in \mathbb{Z}$

(2) Define n is an **odd** integer.

$n = 2k+1$ for some $k \in \mathbb{Z}$

(3) Define a **divides** b.

$b = ka$ for some $k \in \mathbb{Z}$

(4) Define a and b have the same **parity**.

Either a and b are both even or both odd.

(5) State the **division algorithm**.

If a, b are integers with $b > 0$ there are integers q, r such that

$$a = qb + r \quad \text{and} \quad 0 \le r < b$$