

ProofSpace Comprehension Quiz

Proof Techniques

Unraveling Definitions

1 Decide if the following are true or false.

- a) 127 is even.
- b) 388 is even.
- c) π is even.

2 Decide if the following are true or false.

- a) $4 \mid 13$.
- b) $-8 \mid 64$.
- c) $18 \mid 9$.
- d) $12 \mid 0$.
- e) $-1 \mid 1$.
- f) $15 \mid 15$.

3 Decide if the following are true or false.

- a) $-8 \equiv 19 \pmod{9}$.
- b) $18 \equiv 1287 \pmod{2}$.
- c) $0 \equiv 16 \pmod{4}$.
- d) $29 \equiv 18 \pmod{22}$.
- e) $9 \equiv 10 \pmod{3}$.
- f) $155 \equiv 140 \pmod{5}$.