

Quiz 16

1. (a) $f(a) \cdot f(b) \cdot f(c) = 8^3 = 512$

(b) $8 \cdot 7 \cdot 6 = \frac{8!}{5!} = 336$

(c) none since $|B| > |A|$.

2. (a) $f(2) = 3$ but $2 \neq -2$,
 $f(-2) = 3$

so f is not 1-1

(b) $\text{Im } f = \{x \in \mathbb{Z} : x \leq 5\}$

so f is not onto.