

## Quiz 15B.

1. What does the First Isomorphism Theorem for Rings say about the ring homomorphism  $\varphi: R \rightarrow S$ ?
2. Every ring with unity contains an isomorphic copy of \_\_\_\_\_
3. Every field with characteristic 0 contains an isomorphic copy of \_\_\_\_\_
4. (True/False) Every integral domain can be extended to a field (as isomorphic to a subring of the field).