

QUIZ 5: CHAPTERS 10 & 11 APRIL 25

Name: _____

- Complete this quiz without any aids, including the text or your peers.
- You may leave your answers unsimplified.

Let $A = \{1, 2, \dots, 10\}$ and $B = \{1, 2, \dots, 15\}$.

(1) How many relations from A to B are there?

(2) How many functions from A to B are there?

(3) How many functions from A to B are injective?

(4) How many functions from A to B are not injective?

(5) How many functions from B to A are there?

(6) How many functions from B to A are injective?

(7) How many functions from B to A have a range with exactly 2 elements?