

MATH 3050 (Barsamian) Class Drill 7.1.1: How Many Functions are Possible?

(1) Find all possible functions from $X = \{1,2\}$ to $Y = \{a,b\}$.

(2) Find all functions from $X = \{1,2,3\}$ to $Y = \{a\}$.

(3) Find all functions from $X = \{1,2,3\}$ to $Y = \{a,b\}$.

(4) How many functions are there from a set with three elements to a set with five elements?

(5) How many functions are there from a set with six elements to a set with three elements?

(6) Suppose that m and n are positive integers. How many functions are there from a set with m elements to a set with n elements?

