

Help is legal.

141 Take Home Quiz 6

Print Name \_\_\_\_\_

Section or class time \_\_\_\_\_

1. A store sells 5 colors of ink.

a) How many ways can the 5 colors be displayed?

b) How many ways can they choose and display any 3 of the 5 colors?

2. A store sells 5 colors of ink in 3 sizes:

red, yellow, blue, green, and black in S M and L.

Determine the number of choices a person has if he buys:

a) exactly 2 packages in different colors of the same size.

b) exactly 2 packages in different colors of different sizes.

c) exactly 4 packages of different colors in random sizes. The sizes can be the same or different; some the same some different.

3. A standard 52-card deck consists of 13 denominations: 1 through 10 and J, Q, K. Each denomination has 4 suits: club, spade, diamond and heart.

A person chooses 2 cards from a standard 52-card deck. How many ways can he choose:

a) any face card which is not a heart and any heart?

b) any 2 face cards or any 2 hearts?

4. A code is made of 7 digits chosen from 0, 1, ..., 9 .

a) How many codes contain exactly three 8's , exactly two 7's , one 3 and one 6?

b) How many codes contain exactly three 8's, exactly two 7's and any two **other** different digits?