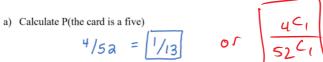
Precal Review 9.1-10.1 Name: Rey

1. A card is drawn from a normal 52 card deck which consists of:

8:21 AM

- 13 cards in each suit (diamond, clubs, spades, and hearts)
- 3 of the thirteen in each suit are face cards. There is one ace for each suit.



b) Calculate P(the card is a five or six)

- 2. In your reading class has a reading list that consists of 11 fiction books and 7 non-fiction books.
 - a) In how many ways can you select a fiction and a non-fiction book? oR $11 \cdot 7 = 77$

$$_{11}C_{11}$$
, $_{7}C_{1} = \boxed{77}$

b) In how many ways could you select a fiction book and then another fiction book?

- 3. Fourteen people try-out for a softball team. In how many ways could they select:
 - a) a First basemen and a Third basemen Roles are defined!

b) After picking your First and thenThird Basement, how many ways can you select a catcher and then another catcher?



$$\frac{6 C_3 + 4C_3 + 7C_3}{17C_3} = \frac{59}{680} = \boxed{.089}$$

5. How many license plates can be made with 2 letters followed by three numbers if letters and numbers CANNOT be repeated?

8. Find the number of distinguishable permutations of the letters in each word.

$$\frac{81}{21} = 20160$$

$$\frac{6!}{2!2!} = 180$$

a. How many ways could this committee be composed?
$$_{20}$$
 C $_{8}$

only 7 men
$$\Rightarrow$$
 need at least 1 man to complete group

Just for fun...

$$_{n}P_{5} = 3(_{n+1}P_{4})$$