Integrated II Unit 2 Name

Combined Probabilities Date Period:

A deck of cards contains 52 cards. The deck consists of 4 suits – hearts, spades, diamonds, and clubs – with 13 cards in each suit. Each suit contains 3 face cards – King, Queen, and Jack.

1. A card is randomly selected from a deck of cards.

a. What is the probability that it is a face card or a spade?

b. What is the probability that it is a 10 or a face card?

c. What is the probability that it is an ace or an eight?

d. What is the probability that it is red or a Jack?

2. Two cards are randomly selected from a deck of cards.

a. What is the probability that the first is an ace and the second is an eight?

b. What is the probability that the two cards selected are a 10 and a face card?

3. A card is randomly selected from a deck of cards, replaced, and a second card is drawn.

a. What is the probability that the first is an ace and the second is an eight?

b. What is the probability that the two cards selected are a 10 and a face card?

4. Which problems above show the following how can you determine which type it is?

a. Dependent events b. Independent events

c. Mutually exclusive events d. Overlapping events

5. One card is randomly selected from a deck of cards. What is the probability that it is

a. A king and a diamond? b. A king or a diamond

c. A 6 and a face card d. Not a heart