

Student Name: \_\_\_\_\_ Score: \_\_\_\_\_

**Independent and Dependent**

Two cards are drawn from a standard deck of 52 cards one after another.

Problems

Work Space

Find the probability of drawing a king card on the first draw.

Answer: \_\_\_\_\_

If the first card is king and the card is not replaced, what is the probability of selecting a king on the second draw?

Answer: \_\_\_\_\_

Find the probability of selecting a king from the first draw and a queen on the second draw without replacing the first card.

Answer: \_\_\_\_\_

Find the probability of selecting a Jack on the first draw and a queen on the second draw after replacing the first card.

Answer: \_\_\_\_\_

Find the probability of selecting a 6 or 7 on the first draw and an 8 or 9 on the second draw without replacement.

Answer: \_\_\_\_\_

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Answer key

### Independent and Dependent

Find the probability of drawing a king card on the first draw.

Answer:  $\frac{1}{13}$

If the first card is king and the card is not replaced, what is the probability of selecting a king on the second draw?

Answer:  $\frac{1}{17}$

Find the probability of selecting a king from the first draw and a queen on the second draw without replacing the first card.

Answer:  $\frac{4}{52} * \frac{4}{51} = \frac{4}{663}$

Find the probability of selecting a Jack on the first draw and a queen on the second draw after replacing the first card.

Answer:  $\frac{4}{52} * \frac{4}{52} = \frac{1}{169}$

Find the probability of selecting a 6 or 7 on the first draw and an 8 or 9 on the second draw without replacement.

Answer:  $\frac{8}{52} * \frac{8}{51} = \frac{16}{663}$