

I pledge my honor that I have neither given nor received aid on this exam.

NAME

Z NUMBER

Show all work (attach work pages). Write on one side of page only. Write answers in space provided. No credit for an answer not supported by a calculation or an explanation. Staple in upper left-hand corner.

Fran and Ron are each dealt 2 cards from a shuffled deck of 52 playing cards (that is, two 2-card hands are dealt from a shuffled 52-card deck).

1. Find the probability that Fran gets the Queen of Hearts.
2. Find the probability that Ron gets the Ace of Spades.
3. Find the probability that Fran gets the Queen of Hearts and Ron gets the Ace of Spades.
4. Find the probability that Fran gets both the Queen of Hearts and the Ace of Spades.
5. Find the probability that Fran gets the Queen of Hearts or Ron gets the Queen of Hearts.
6. Find the probability that Fran gets the Queen of Hearts or Ron gets the Ace of Spades.

$$1 \quad \frac{2}{52} = 0.03846$$

$$2 \quad \frac{2}{52} = 0.03846$$

$$3 \quad \frac{1}{663} = 0.001508$$

$$4 \quad \frac{1}{1326} = 0.000754$$

$$5 \quad \frac{1}{13} = 0.076923$$

$$6 \quad \frac{50}{663} = 0.075415$$