

SCORE

/20

NAME:.....

1. A card is dealt from a complete deck of 52 cards. Find the probability that the card is

(i) a jack and red

(ii) a jack or red

(iii) not a red jack

2. In a 5/35 lottery, 5 different numbers from the numbers 1 through 35 are picked as the “winning numbers”. A 1st prize is awarded to any ticket whose 5 numbers are the 5 winning numbers, and a second prize goes to any ticket with 4 (but not all 5) of the winning numbers. Find the probability of

(i) A ticket winning a first prize

(ii) A ticket winning a second prize

3. A salesman knows that his commission will be 0,1,2,3, or 4 '000 dollars with the probabilities given in the following table:

commission	0	\$1000	\$2000	\$3000	\$4000
probability	0.15	0.2	0.45	0.1	0.1

Find the salesman's expected commission.