Probability

Surprise Test

(1) (1) No. of outcomes - 1000 times
Tail = 545
$P(\text{Tail}) = \frac{545}{1000} = 0.545$ True

$P(A) = 1 - P(A')$
Ans → Both A & R are individually true but R is not correct explanation of A

(2) Sum of probabilities = 1
Because there are all possible events

(3) No. of ace or black card = 26
Total No. of cards = 52
So $P(E) = \frac{26}{52}$

So Ans = $\frac{26}{52}$

(4) Probability of not hitting boundaries = 18
Total outcome = 30
$P(E) = \frac{18}{30} = \frac{9}{15} = \frac{3}{5}$

(5) Probability of impossible event = 0

(6) Performing an event once is called Trial

(7) No. of king queen or Jack = 16
Total cards = 52
$P(E) = \frac{16}{52}$

(8) Total outcome = 16
No. divisible by 3 & 6 = 5
So $P(E) = \frac{5}{16}$

(9) $P(E) = \frac{1}{2}$

(10) Maximum probability = 1.