CAVALRY DEFENCE ACADEMY, (CDA)
DEHRADUN - 8381042191

PROBABILITY

PROBABILITY

$$P(E) = \frac{Number\ of\ Favorable\ outcome}{Total\ Number\ of\ trials}$$

Head
tail

Head
tail
2/4

event

$$P(E) = \frac{\text{Number of trials in which the event happened}}{\text{Total numbers of trials}}$$

4

$\frac{2}{4} = \frac{1}{2} = .5$

0 - 1

(4) Boundary
Full toss
Short pitch
Good length

Probability of an event could be

$$0 \leq P(E) \leq 1$$

PROBABILITY

BLANK SLIDE FOR WORK

Question:- (a) Red and green in a pocket

(b) पत्ते का Concept

(c) Coin (head / tail)

(d) Dice

Think

Maths Problem

$\frac{3}{6} = \frac{1}{2}$ $\frac{1}{3}$

(a) (b) (c) (d)

(a) 1/3

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PROBABILITY

CDA QUESTION NO 1. In a simultaneous throw of a pair of dice, find the probability of getting:

6 × 6 = 36 total outcomes

(i) 8 as the sum

(2,6) (3,5) (4,4) (5,3) (6,2)

(ii) a doublet

(1,1) (2,2) (3,3) (4,4) (5,5) (6,6) ⇒ $\frac{6}{36} = \frac{1}{6}$

(iii) a doublet of prime numbers

(2,2) (5,5) (3,3) $\frac{3}{36} = \frac{1}{12}$

(iv) a doublet of odd numbers

1/12

(v) a sum greater than 9

(6,5) (5,6) (6,6) (6,4) (4,6) 9/36 1/4

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PROBABILITY

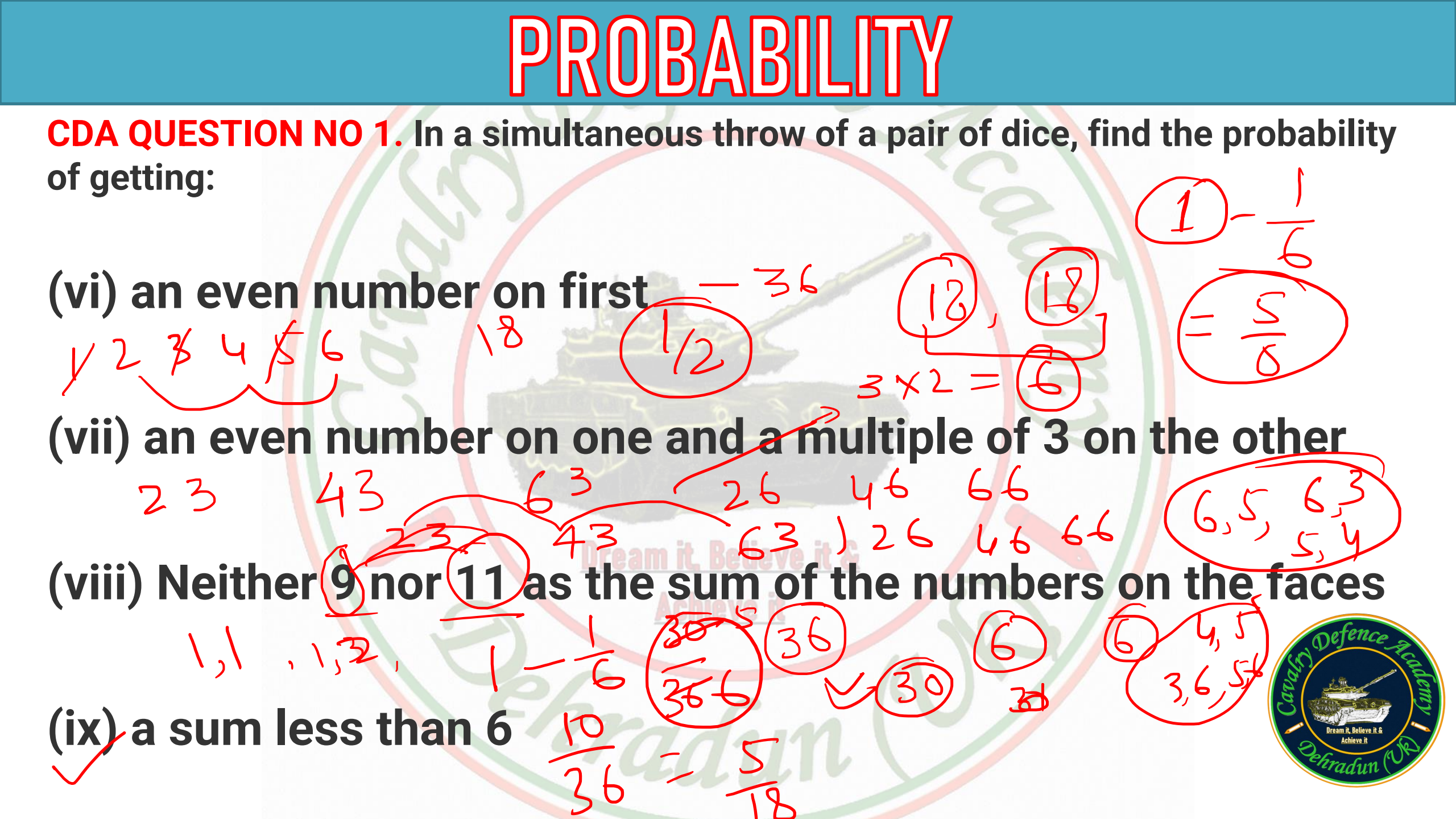
CDA QUESTION NO 1. In a simultaneous throw of a pair of dice, find the probability of getting:

(vi) an even number on first

(vii) an even number on one and a multiple of 3 on the other

(viii) Neither 9 nor 11 as the sum of the numbers on the faces

(ix) a sum less than 6



PROBABILITY

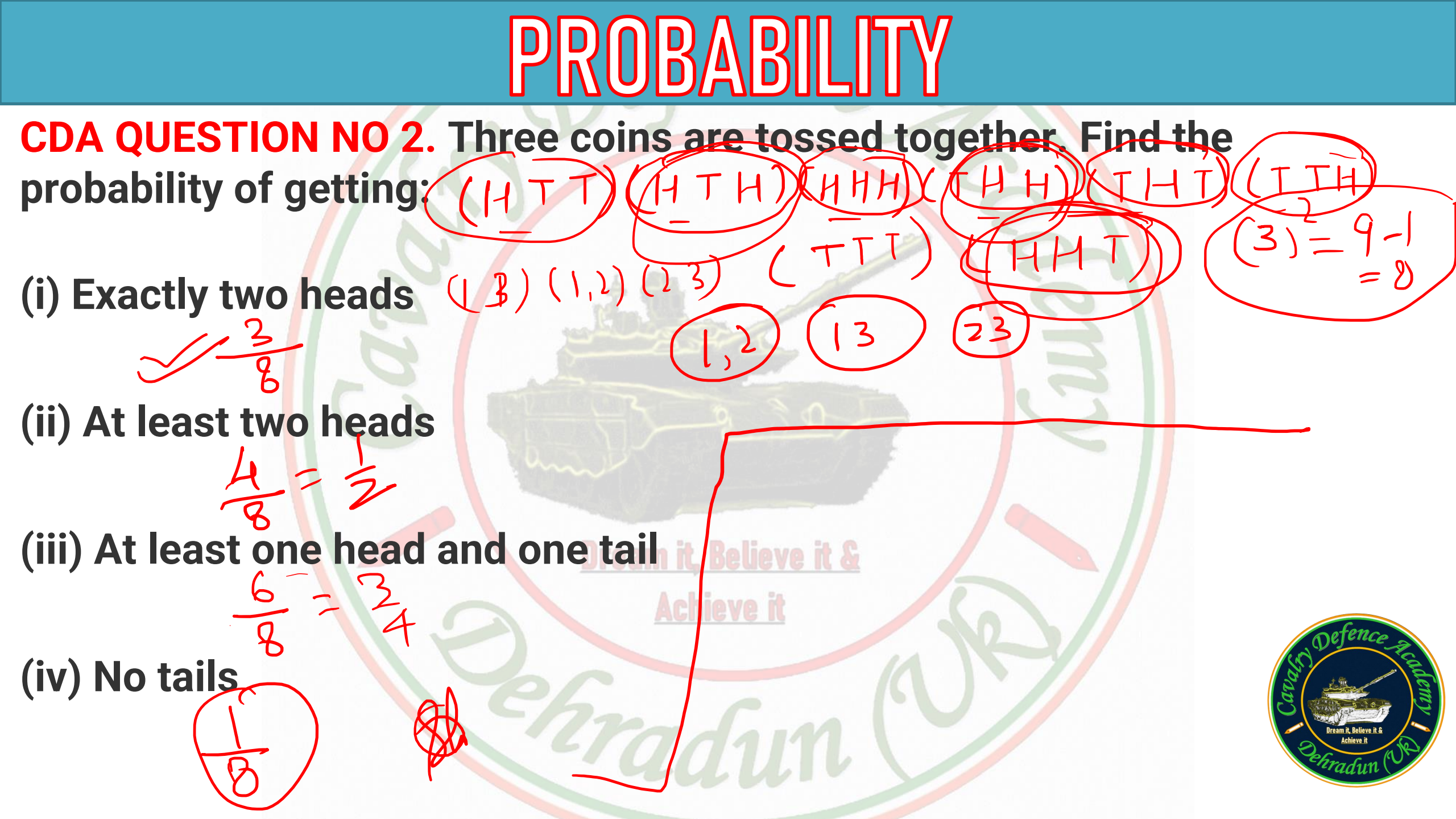
CDA QUESTION NO 2. Three coins are tossed together. Find the probability of getting:

(i) Exactly two heads

(ii) At least two heads

(iii) At least one head and one tail

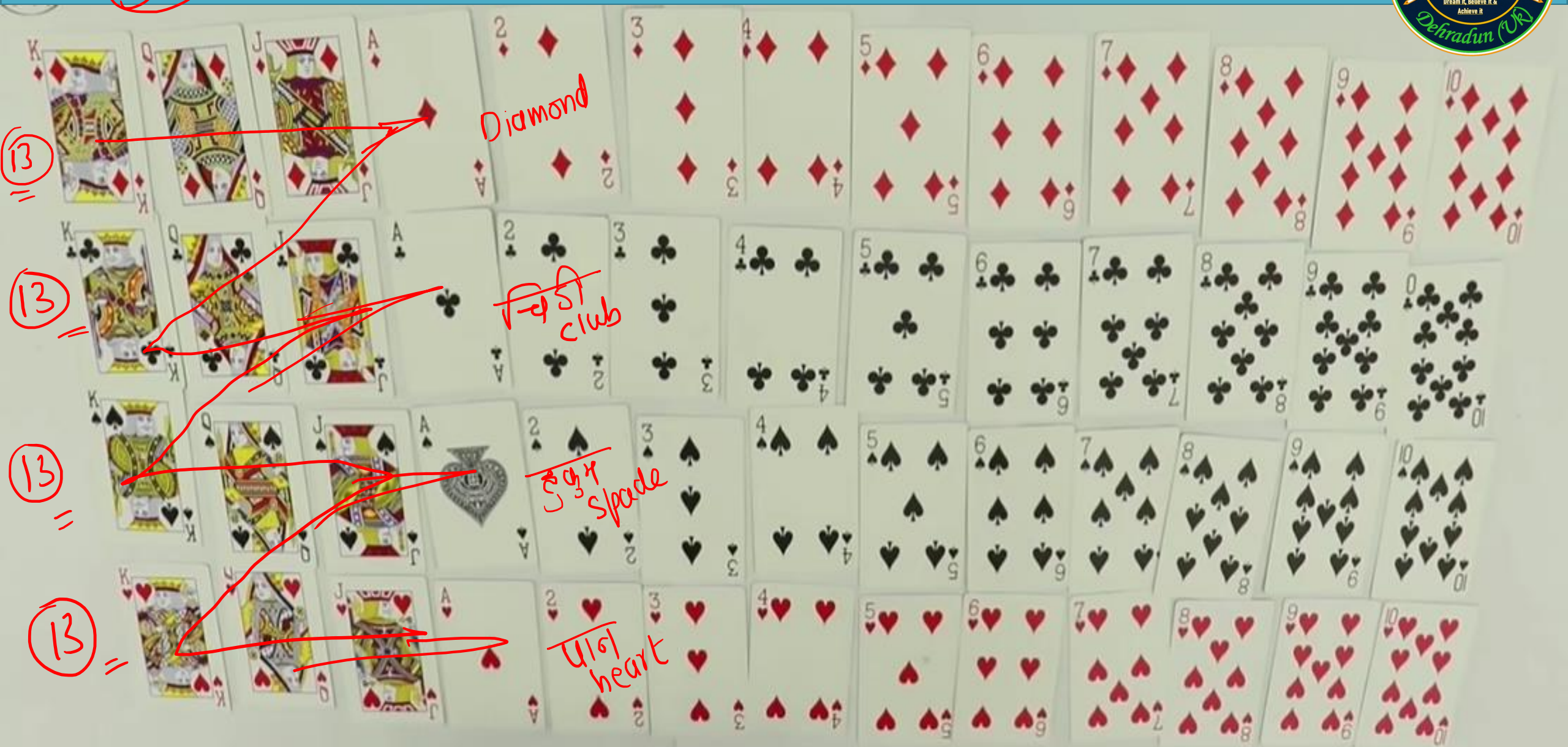
(iv) No tails

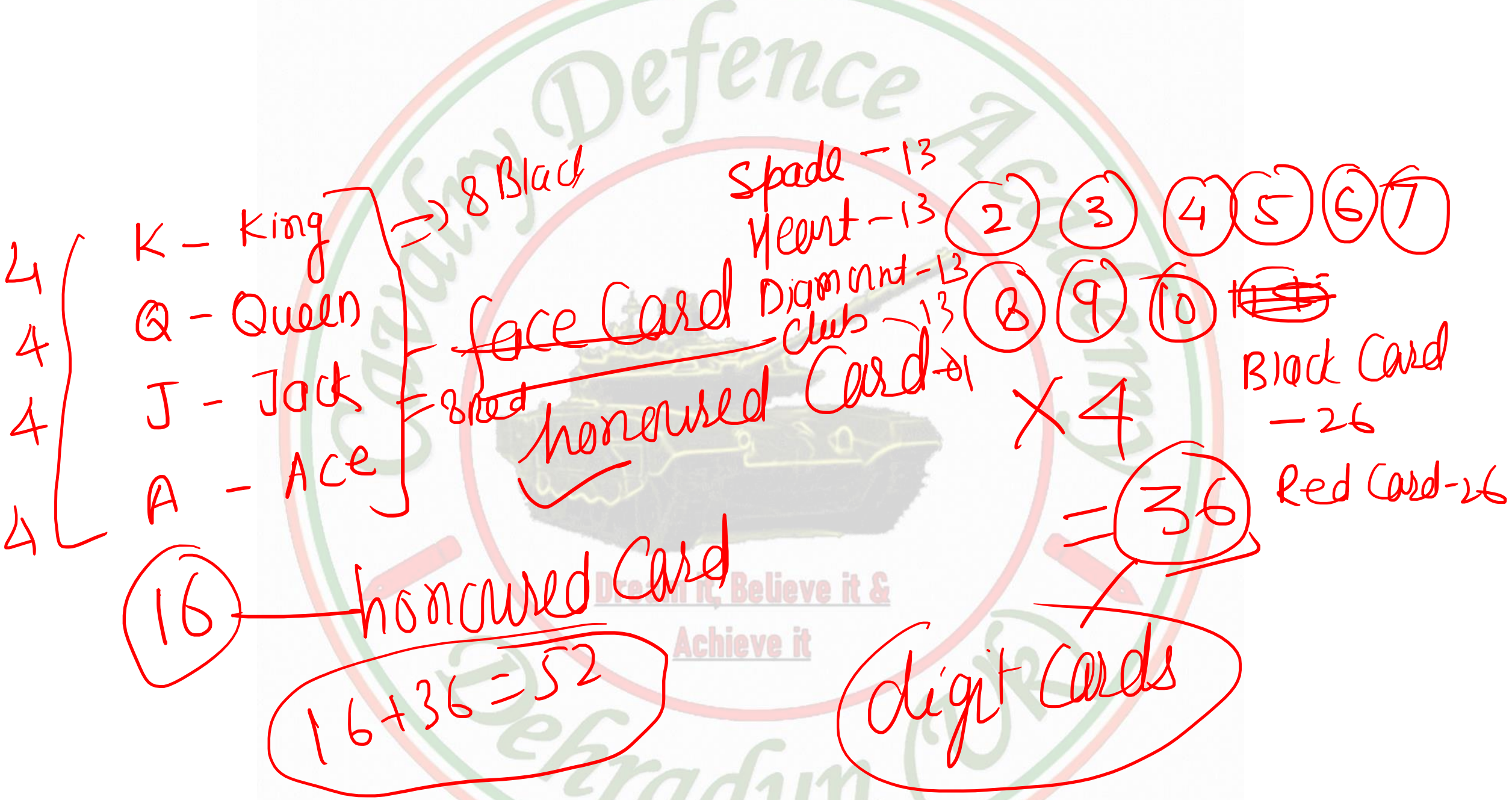


PROBABILITY

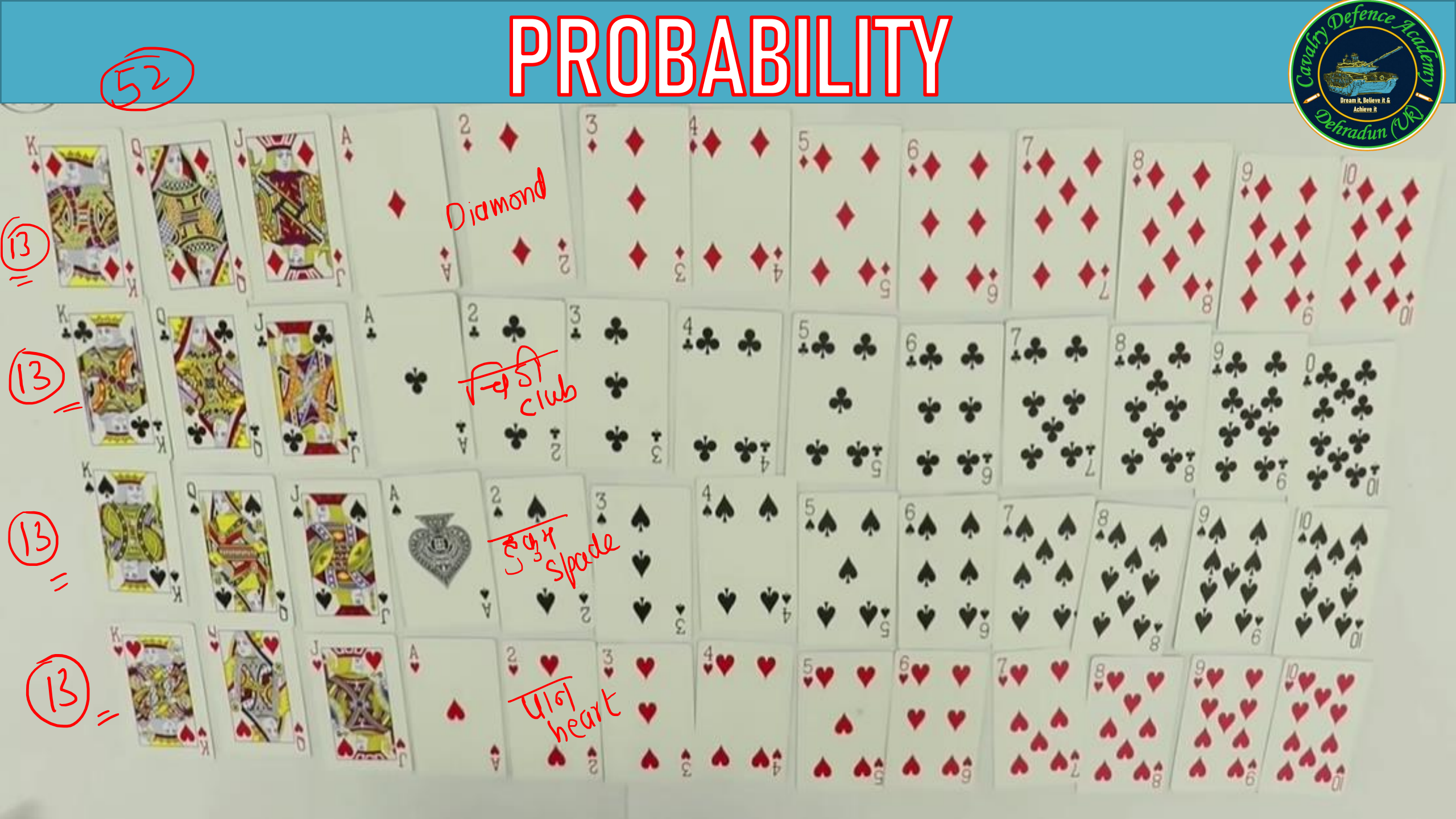
52

52




4 K - King
4 Q - Queen
4 J - Jack
4 A - Ace
8 Black
Face Card
Honoured Card
16
Honoured Card
16+36=52
Spade - 13
Heart - 13
Diamond - 13
Club - 13
2 3 4 5 6 7
8 9 10
Black Card - 26
Red Card - 26
X 4
= 36
digit Cards

PROBABILITY



PROBABILITY

CDA QUESTION NO 3 - A card is drawn at random from a pack of 52 cards. Find the probability that the card was drawn is:

(i) a black king

$\frac{2}{52} = \frac{1}{26}$

(ii) either a black card or a king

$26 + 2 = 28$

$\frac{28}{52} = \frac{7}{13}$ Ans

(iii) black and a king

$\frac{1}{26}$

(iv) a jack, a queen or a king

$\frac{12}{52} = \frac{3}{13}$

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PROBABILITY

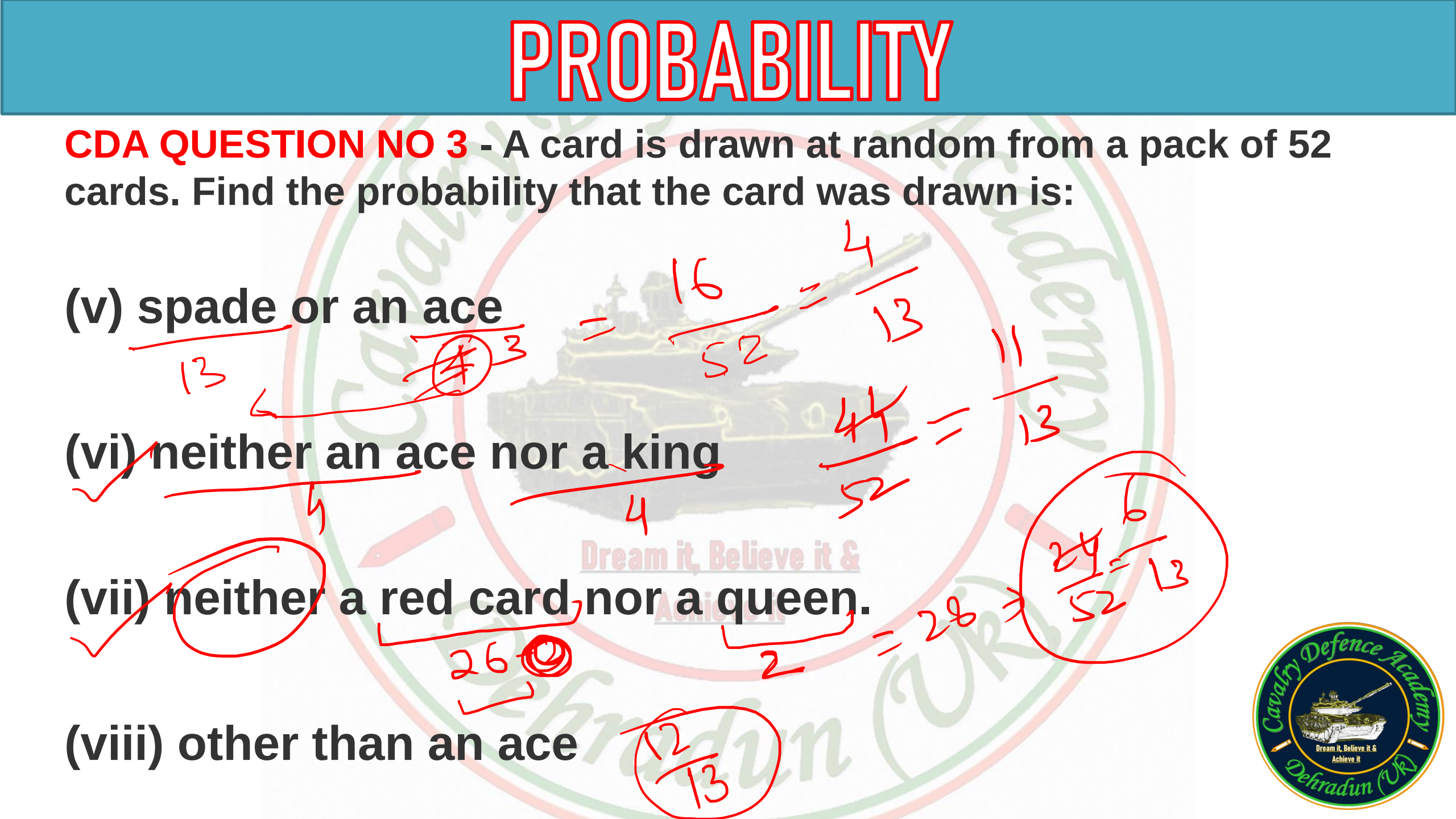
CDA QUESTION NO 3 - A card is drawn at random from a pack of 52 cards. Find the probability that the card was drawn is:

(v) spade or an ace

(vi) neither an ace nor a king

(vii) neither a red card nor a queen.

(viii) other than an ace



PROBABILITY

CDA QUESTION NO 3 - A card is drawn at random from a pack of 52 cards. Find the probability that the card was drawn is:

(ix) other than an jack

48 | 1 | 4 | 48/52 = 12/13 | 12/13

(x) a ten

(xi) a spade

(xii) a black card

$P(E) = \frac{\text{attack case}}{\text{---}} = \frac{26}{52} = \frac{1}{2}$ Ans.

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PROBABILITY

CDA QUESTION NO 3 - A card is drawn at random from a pack of 52 cards. Find the probability that the card was drawn is:

(xiii) the seven of clubs 1/52

(xiv) jack 4/52 = 1/13

(4) 1/13

(xv) the ace of spades 1/52

(xvi) a queen 1/13

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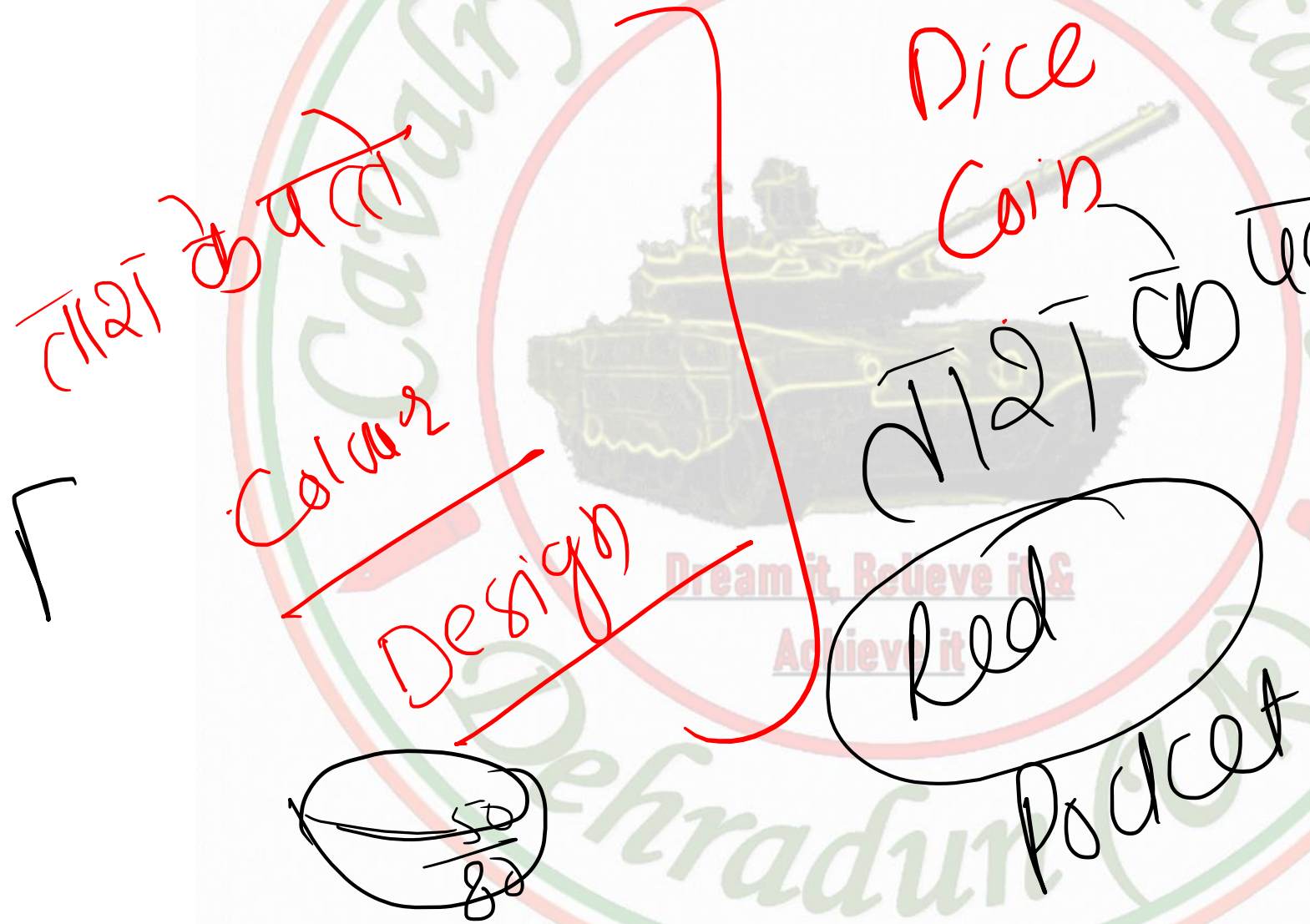
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