ALL BRANCHES

GENERAL APTITUDE

Quantitative Aptitude

Super 1500

Lecture No.- 02

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Recap of Previous Lecture

Topic Question Based on Quantitative Aptitude

Topics to be Covered

Topic Quantitative Aptitude

[MCQ]

[Marks 1]

#Q. What is the maximum percentage discount (approximately) that a merchant can offer on his marked price, so that he ends up selling at no profit or loss, if he initially marked his goods up by 40%?

A 40%

B 60%

C 28.5%

D 33.5%

S.P

$1.4(C.P) = M.P$

$1 - 0.7143$

$= 0.2857$

$1.4\,S.P = M.P$

$S.P = \frac{5}{7}\,MP$

$S.P = \frac{10}{14}\,M.P.$

$S.P = 0.7143$

[MCQ]

[Mark 1]

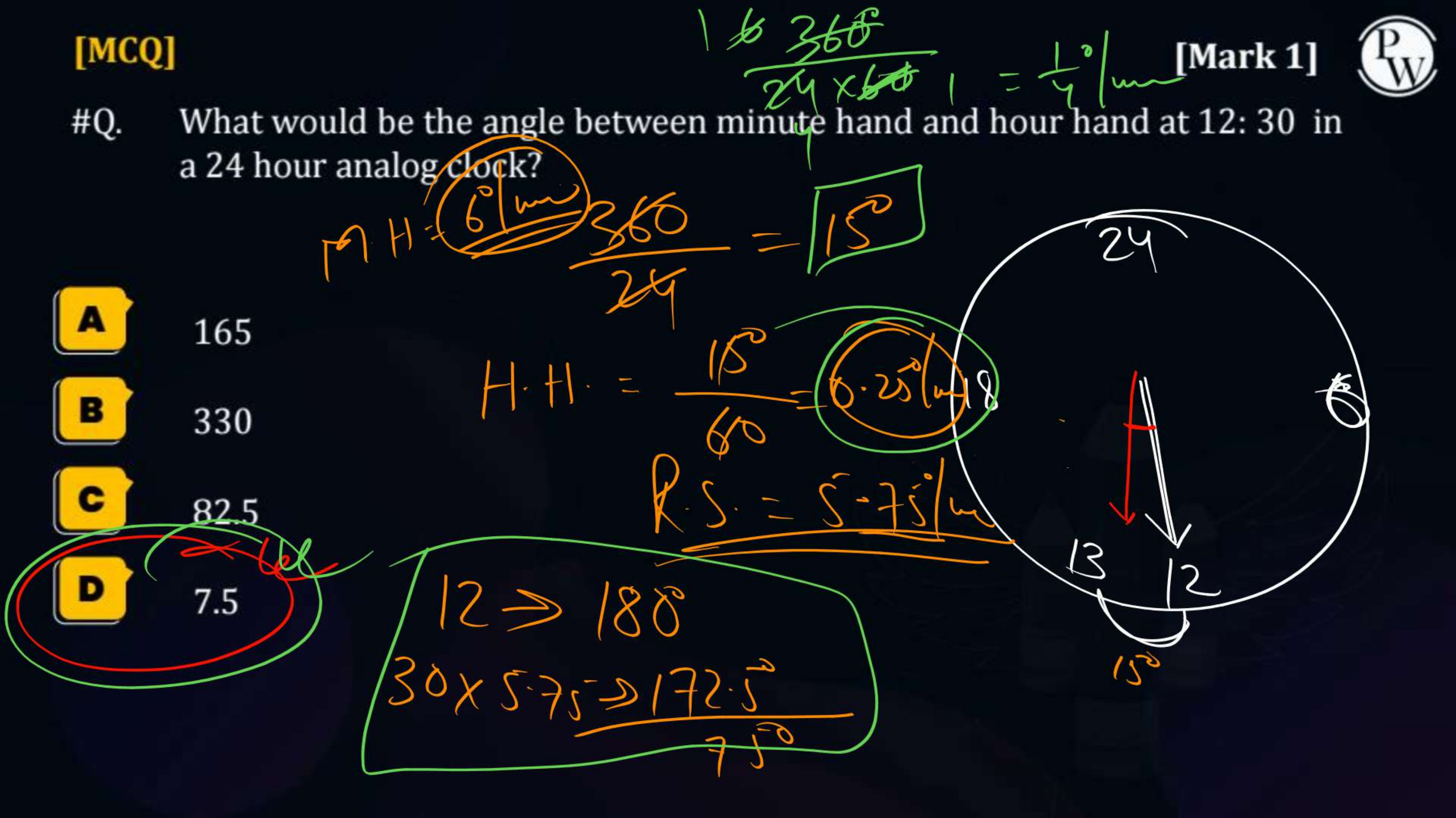
#Q. What would be the angle between minute hand and hour hand at 12: 30 in a 24 hour analog clock?

A 165

B 330

C 82.5

D 7.5



[MCQ]

[Mark 2]

#Q. At a dinner party every two guests used a bowl of rice between them, every three guests used a bowl of dal between them and every four used a bowl of meat between them. If altogether there were 65 bowls, then how many guests were there in the party?

A 24

B 16

C 60

D 84

No. of guests = x

Rice Bowl = $\frac{x}{2}$ 30

Dal Bowl = $\frac{x}{3}$ 20

Meat Bowl = $\frac{x}{4}$ 15

65

$\frac{x}{2}+\frac{x}{3}+\frac{x}{4}=65$

$\frac{6x+4x+3x}{12}=65$

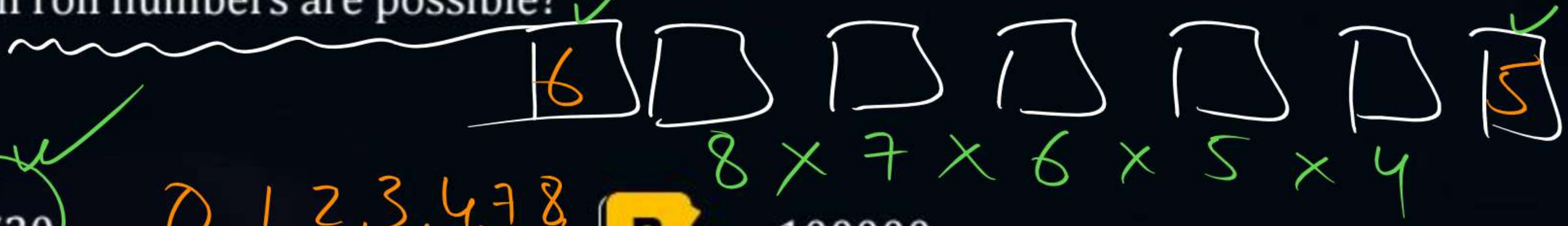
$\frac{13x}{12}=65$

$x = 60$

[MCQ]

[Mark 1]

#Q. There is a seven digit roll number with all different digits. If the digits at extreme right and extreme left are 5 and 6 respectively, then how many such roll numbers are possible?



A 6720

B 100000

C 3024

D 604800

0, 1, 2, 3, 4, 7, 8

9.

= 56 × 120

= 6720

[MCQ]

[Marks 2]

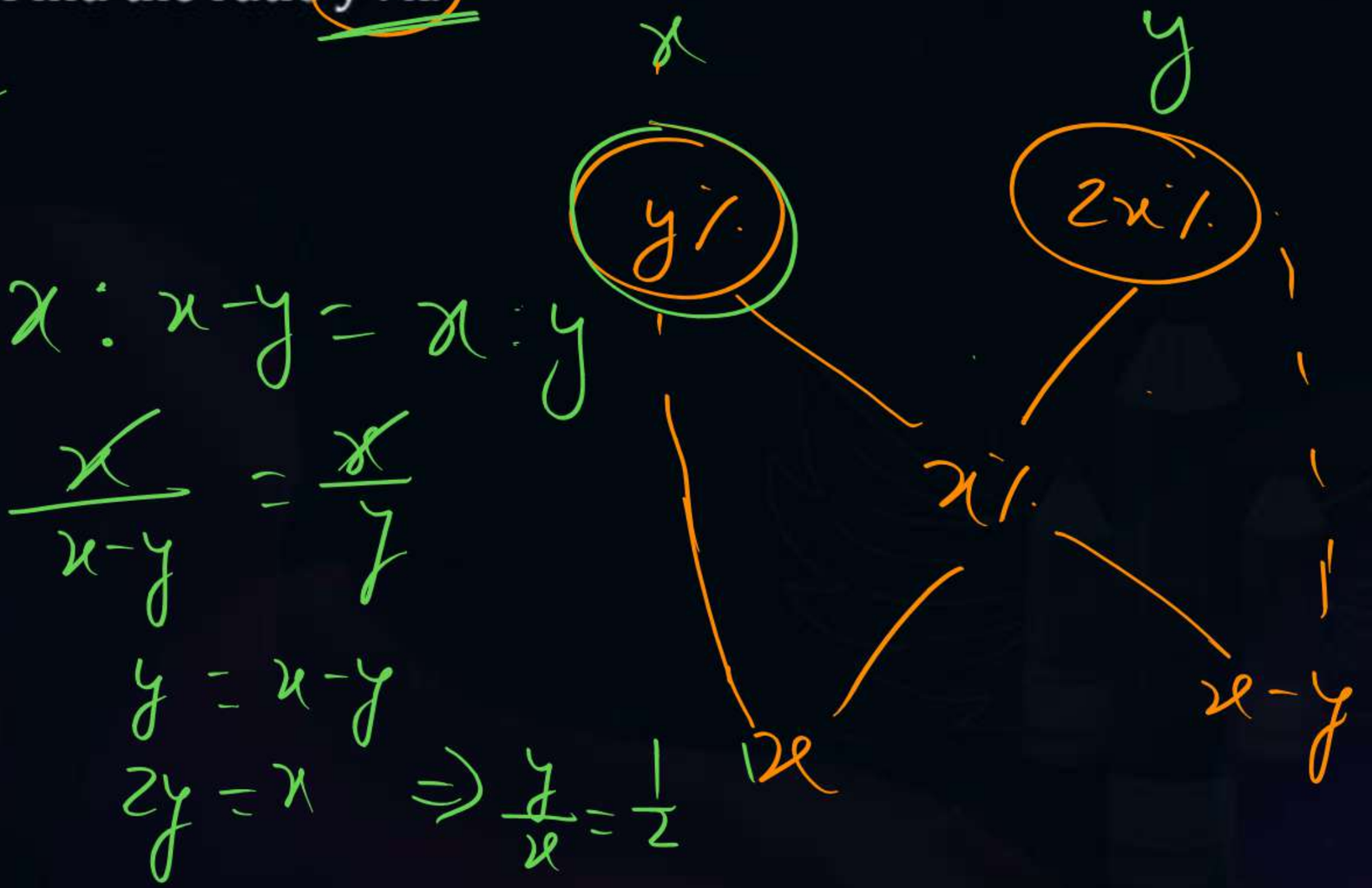
#Q. x litres of y% milk are mixed with y litres of 2x% milk to get a mixture that is x% milk. Find the ratio y : x.

A 1:2

B 3:2

C 2:3

D 2:1



$x : x-y = x : y$

$\frac{x}{x-y} = \frac{x}{y}$

$y = x-y$

$2y = x \Rightarrow \frac{y}{x} = \frac{1}{2}$

[MCQ] [Mark 2]

#Q. At mid night, the engine of a train was exactly mid way of a tunnel which is three times as long as the train. It completely emerged from the tunnel at 12:00:35. The same train enters another tunnel at 3:03:08 which is five times as long as the previous tunnel. At what time the train would completely come out from the second tunnel?

A 3:05:14

B 3:06:52

C 3:04:32

D 3:04:44

12am

3:03:08

+3:44

3:6:52

Train = x

$D = \frac{3x}{2} + x$

$T = 35$ sec

$S = \frac{5x}{2 \times 35} = \frac{5x}{70}$

$T_1 = 3x$

$T_2 = 15x$

$D = 15x + x = 16x$

$S = \frac{5x}{70}$

$T = 16x \times \frac{70}{5x} = 224$ sec

3 min 44 sec

[MCQ] [Mark 2]

C.P = 10,000 | S.P = 12,500

124 × 12,500 = 15,50,000

#Q. An air cooler company decides to offer a variable discount depending on the season. In winter the discount is 37.5%, in the rainy season the discount is 30% and in summer it is 10% discount. The number of air coolers sold during these seasons is 24, 40 and 60 respectively. If each air cooler costs ₹10000 and a net profit of 25% is obtained, then what is the marked price of each cooler (approx.)?

W ⇒ 24 × 0.625x = 15x

R ⇒ 40 × 0.7x = 28x

S ⇒ 60 × 0.9x = 54x

97x

S.P = 97x

97x = 15,50,000

$x = \frac{15,50,000}{97}$

x = 15979.38

M.P = $\frac{x}{1}$

A ₹ 15979

B ₹ 17241

C ₹ 16826

D ₹ 17754

[MCQ]

4 odd days [Mark 1]

#Q. If 5th January, 1971 was Saturday, what day of the week was it on 4th March, 1972?

+4

1 odd day

5th Jan, 1971 — 4th March, 1972

5th Jan, 1972

A Wednesday

B Thursday

C Tuesday

D Friday

Jan - 5 (26)

Feb - 1

17 - 4

10 → 3 odd days

[MCQ]

[Marks 2]

#Q. A merchant sells his cloth at 25% profit. However he finds that on average for every 24 metre he sells 4 metre cloth get wasted. What is his overall profit or loss%?

$$\frac{SP}{C.P} = 1.25 \times \frac{24}{28} = \frac{30}{28}$$

A 8.33% loss

B 10.25% profit

C 6.25% profit

D 7.14% profit

$= 1.07142$

07142

7.142% P

[MCQ]

[Marks 1]

#Q. How many numbers greater than 1000 but less than 4000 can be formed with the digits 0, 1, 2, 3, 4 repetition of digits being allowed?

TH H T U

3 × 5 × 5 × 5

1

2

3

= 15 × 25

= 375

A 250

B 125

C 375

D 500

[MCQ]

$1856 - 1684 = 172$

[Marks 2]

#Q. What is the least number that must be subtracted from 1856 so that the remainder when divided by 7, 12 and 16 is 4?

A. 172

B. 1684

C. 308

D. 252

$1680 + 4$

$= 1684$

L.C.M. 7, 12, 16

336

672

1008

1344

1680

7 | 7, 12, 16

4 | 1, 12, 16

1, 3, 4

$= 7 \times 4 \times 3 \times 4$

$= 28 \times 12 = 336$

[MCQ]

[Mark 1]

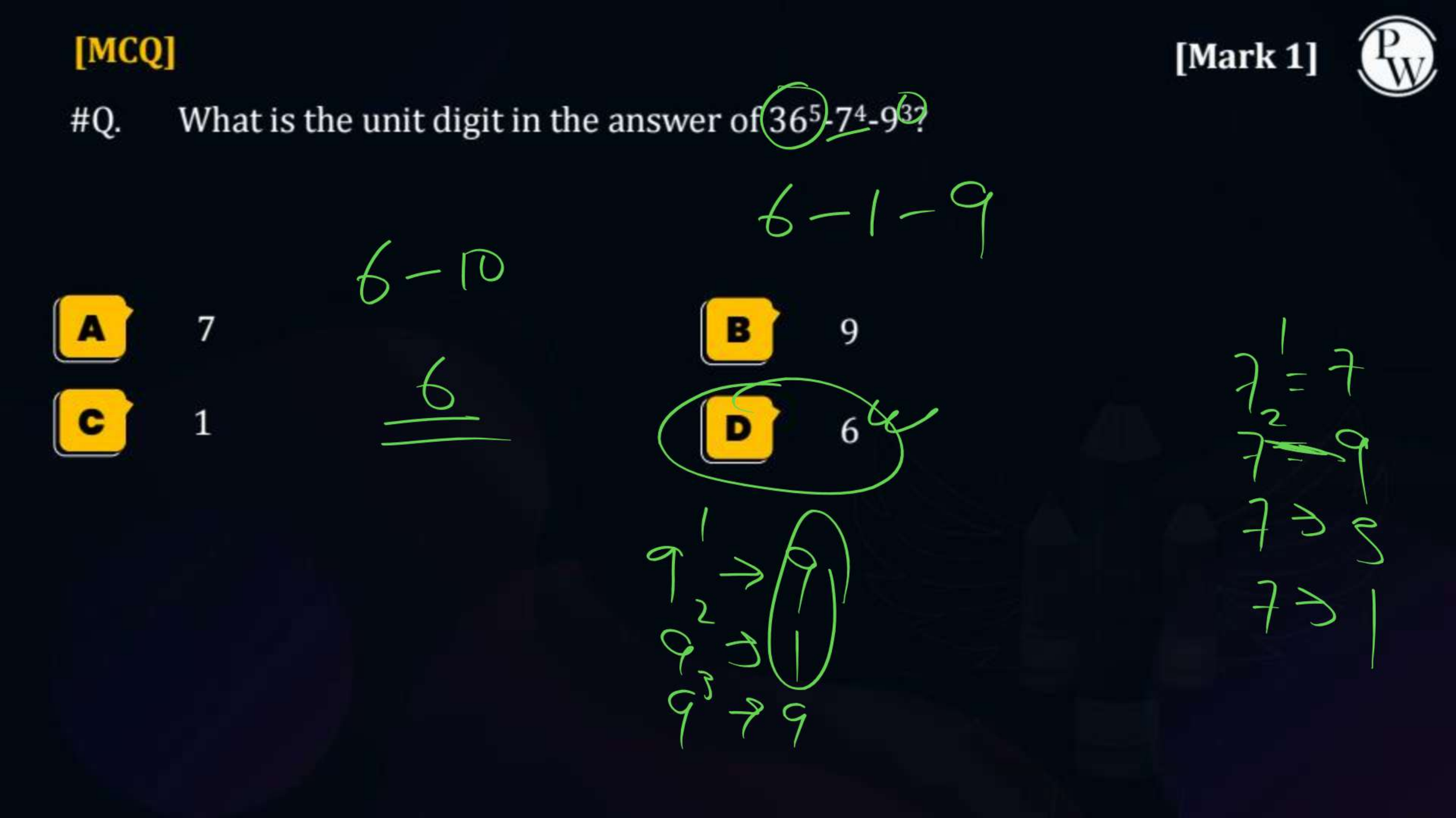
#Q. What is the unit digit in the answer of $36^5-7^4-9^3$?

A 7

B 9

C 1

D 6



[MCQ]

[Mark 1]

#Q. Anil, a milk vendor has certain quantity of milk to sell. After adding water to it, in what ratio the mixture and milk should be so as to gain 5% by selling the mixture at the cost price?

A 1:12

B 5:21

C 1:20

D 21:20

$\frac{SP}{CP} = 1.05 = \frac{105}{100}$ Mix / Milk

Mix : Milk = 105 : 100

21 : 20

[MCQ] [Marks 2]

#Q. There are two alloys P and Q containing gold and copper in the ratio 7:13 and 5:12 respectively. In what ratio should the two alloys P and Q are to be mixed to form a new alloy R having copper and gold in the ratio $\frac{1}{3}:\frac{1}{7}$?

A 2:17

B 3:7

C 4:13

D 3:17

$C:G = \frac{1}{3}:\frac{1}{7}$

$C:G = 7:3$

P $\frac{7}{20}$ Q $\frac{5}{17}$

$\frac{51-50}{170}$

$\frac{3}{10}$ $\frac{1}{20}$

$\frac{3}{10} - \frac{5}{17}$ $\frac{1}{170}$

$P:Q = \frac{1}{170}:\frac{1}{20}$

$= 2:17$

[MCQ]

Rep — Not Allowed

[Marks 1]

#Q. How many four digit numbers can be formed with the digits 0, 1, 3 and 8 so that at least one of the digits is repeated?

3 × 4 × 4 × 4

= 64 × 3

= 192

192 − 18

(A) 192

(B) 174

(C) 238

(D) 256

1 1 1 1

3 × 3 × 2 × 1 = 18

2 mins Summary

Topic Quantitative Aptitude

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THANK - YOU