ALL BRANCH (Hinglish)

General Aptitude

Quantitative Aptitude

DPP 12 Discussion Notes

Number System

By- Amulya Ratan Sir

MCQ

What will be the remainder if 3^{193} is divided by 8?

A 6

B 1

C 5

D 3

$3^1 = 3$, $3 \div 8 \Rightarrow R = 3$

$3^2 = 9$, $9 \div 8 \Rightarrow R = 1$

$3^3 = 27$, $27 \div 8 \Rightarrow R = 3$

$3^4 = 81$, $81 \div 8 \Rightarrow R = 1$

$R = 3$

MCQ

What is the smallest number that when subtracted from 63407 makes it exactly divisible by 9?

A 4

B 3

C 2

D 1

$6+3+4+0+7 = 20$

$20 - 2$

18

MCQ

Find the remainder when 3^{51} is divided by 5.

A 2

B 1

C 4

D 3

$3^1 = 3$, $3 \div 5$, R $\Rightarrow$ 3

$3^2 = 9$, $9 \div 5$, R $\Rightarrow$ 4

$3^3 = 27$, $27 \div 5$, R $\Rightarrow$ 2

$3^4 = 81$, $81 \div 5$, R $\Rightarrow$ 1

$3^5 = 243$, $243 \div 5$, R $\Rightarrow$ 3

$3^6 = 729$, $729 \div 5$, R $\Rightarrow$ 4

$4 \overline{)51}$ (12

48

3

MCQ

If the number 653ab is divisible by 90, then (a + b) = ?

9×10

$b = 0$

$6+5+3+9+0 = 14+a$

$a = 4$

18

$a+b = 4+0$

$= 4$

A 13

B 4

C 22

D 8

MCQ

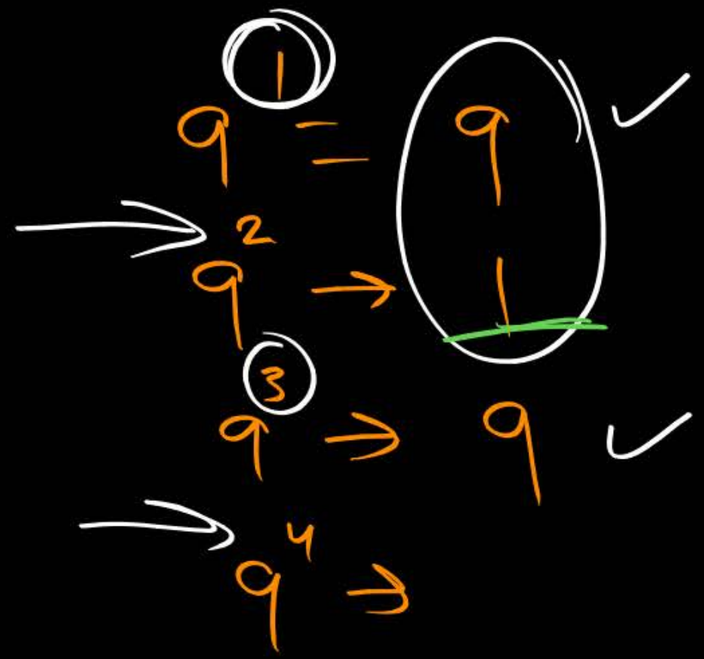
What would be the unit digit in the answer of: $369^{28} + 167^{44}$

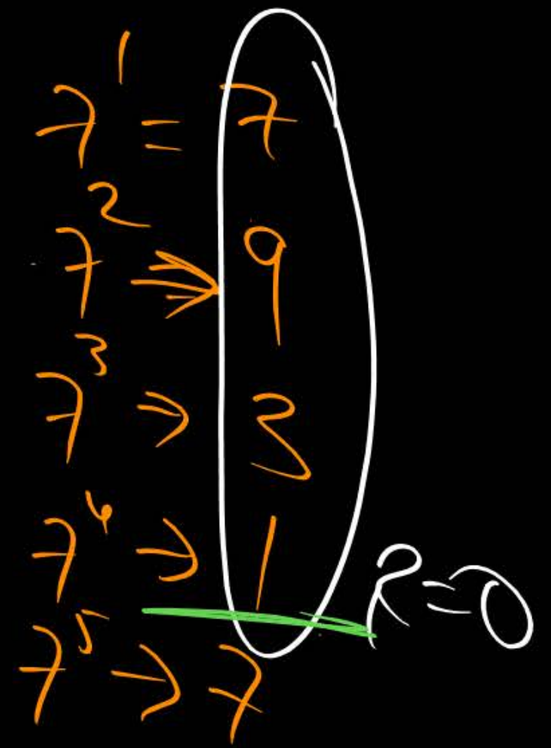
A 1

B 6

C 2

D 7





MCQ

What is the least number that when divided by any of the numbers 7, 16, 28 leaves a remainder of 3 ?

A 116

B 115

C 227

D 113

L.C.M of 7, 16, 28 = 112

112 + 3 = 115

2	16, 28
2	8, 14
	4, 7

2 × 2 × 4 × 7

16 × 7 = 112

MCQ

The only natural number which is neither prime nor composite is?

A 1

B 0

C 13

D 3

1 → 1

MCQ

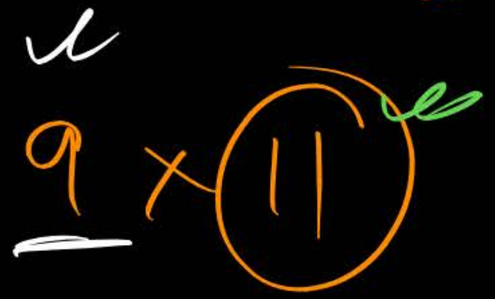
Which largest number of 5 digits is divisible by 99?

A) 99999

B) 99981

C) 99909

D) 99990



MCQ

What should be greatest possible length of a scale which can be used to measure exactly the lengths 7 m, 3 m 85 cm, 12 m 95 cm is.

A 25 cm

B 35 cm

C 45 cm

D 55 cm

35 | 1295 (37
1295
xx

H.C.F of 7m, 3m 85cm, 12m 95cm

7m = 700 cm

3m 85cm = 385 cm

12m 95cm = 1295 cm

35 cm

385) 700 (1
385
315) 385 (1
315
70) 315 (4
280
35

35) 70 (2
70

MCQ

90, 180, 270, 360, 450

184 274 364 454

Find the least multiple of 7, which leaves a remainder of 4, when divided by 6, 9, 15 and 18 is:

LCM of 6, 9, 15, 18 = 90

+4

94

3 | 15, 18

5, 6

3 × 5 × 6

= 90

(A) 94 ✗

(B) 184 ✗

(C) 274 ✗

(D) 364 ✓

Thank You!

GW Soldiers