$2)15(7$
14
1 (2)

$2)15(7$
14
1

$2)15(8$
16
-1

$7)50(7$
49
1

$7)50(8$
56
-6

$15)47(3$
45
2 (×)

$15)47(4$
60
-13

$+2 \quad -13$
47
15

$13)60(4$
52
8

$13)60(5$
65
-5

$+8 \quad -5$
60
13

-13
47
15

$15-13=2$

-13
47
15

12

-1
x
5

$5-1=4$

-7
N (4)
11

-15 6.
N
23

$10)7$ (1)
10
-3

-3 7
N
10

(*)

$-1 \quad +1$
$3\cancel{5}+37$
$\cancel{5}$

$-1+1=0$

72 R:0
6

$+3 \quad +1$

$38 + 43$

7

$\therefore +4$

$2 \quad +5 = 7$

$57 + 49$

11

(c)

$\frac{16}{12}$ $R = 4$

(4) $\frac{16}{12}\,{}^{4}_{3}$ $\frac{4}{3}$ $R = 1 \times 4 = 4$

REMINDER THEOROM

1.Find remainder

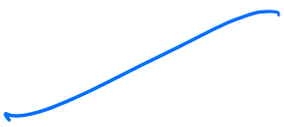
$$\frac{(173 + 139)}{19}$$

+2 +3
173 + 139
19

2+3 = 5 Ans

19 × 9 = 171
19 × 7 = 137

2. Find remainder



+3 −2 8
$$\frac{(1548 + 3028 + 1598)}{15}$$

11 − 2 = 9

1548
1500 + 48

3. Find remainder

21)80(4
84
−4
− −4 = 4

$$\frac{(105 - 80)}{21}$$

84

21)80(3
83
17

− −4 = 4

− 17
21 − 17 = 4

4. Find remainder?

$$\frac{(175 - 110)}{21}$$

5. Find remainder

+8 −2 −2
$$\frac{(348 - 121 - 104)}{17}$$

8 − 4 = 4

6. Find remainder

$$\frac{(32 * 33 * 34 * 35 * 36 * 37)}{17}$$

7. Find remainder

$$\frac{(243 * 245 * 247 * 249 * 251)}{12}$$

8. Find remainder

$$\frac{(553+ 378859+4768+59379)}{25}$$

9. Find remainder

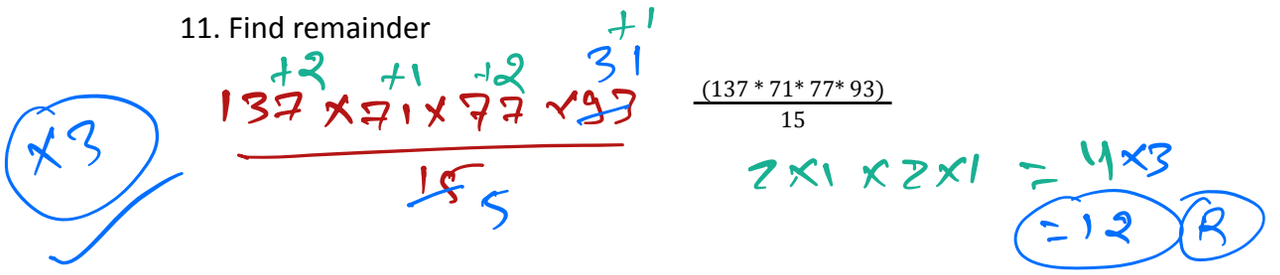
$$\frac{(7361+ 11829+1769)}{8}$$

10. Find remainder

$$\frac{(158 * 68 * 197 * 819)}{11}$$

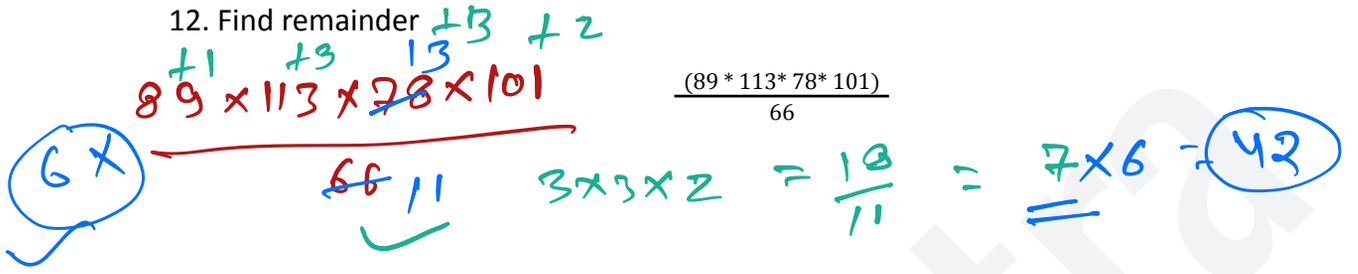
11. Find remainder

$$\frac{(137 * 71 * 77 * 93)}{15}$$



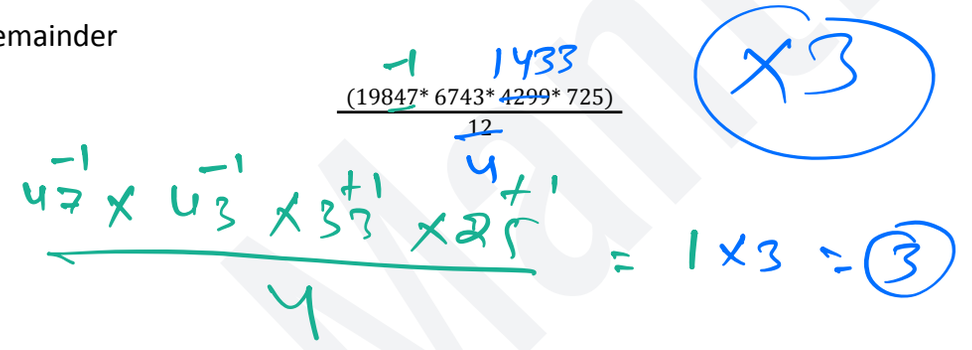
12. Find remainder

$$\frac{(89 * 113 * 78 * 101)}{66}$$



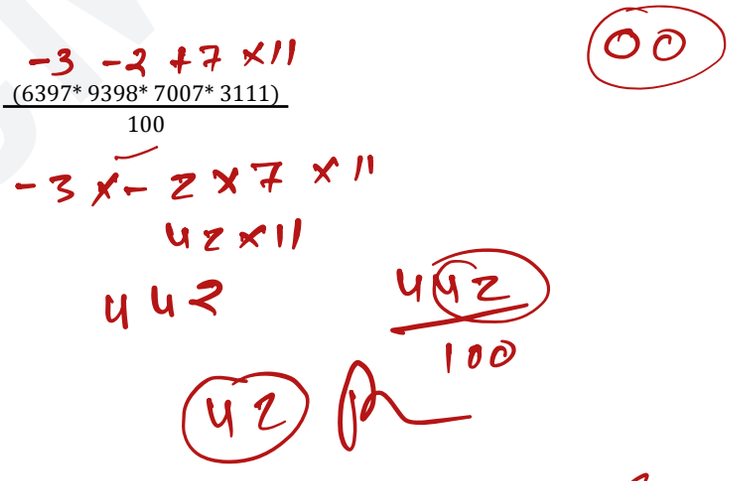
13. Find remainder

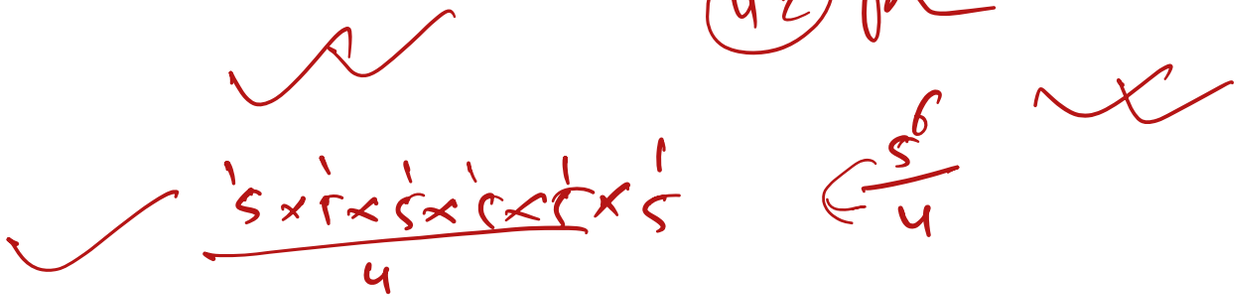
$$\frac{(19847 * 6743 * 4299 * 725)}{12}$$



14. Find remainder

$$\frac{(6397 * 9398 * 7007 * 3111)}{100}$$





TYPE - 02

1. Find the remainder

$\frac{36^{99}}{7}$

2. Find the remainder

$\frac{45^{190}}{23}$

3. Find the remainder

$\frac{3^{80}}{80}$

4. Find the remainder

$\frac{2^{64}}{17}$

5. . Find the remainder

$\frac{6^{237}}{217}$

6. Find the remainder

$$\frac{(68)^{29}+(66)^{31}}{67}$$

$(-1)^{31}$ $(-1)^{29}$ $= 1-1 = 0$

7. Find the remainder

$$\frac{(124)^{124}-15}{25}$$

-1, 124, 25

$(-1)^{124} - 15$

$1-15 = -14$

25

$25-14 = 11$

8. Find the remainder

$$\frac{(124)^{124}-15}{25}$$

9. Find the remainder

$$\frac{(39)^{219}-27}{38}$$

$(-1)^{219}$

$-1-27 = -28$

$38-28 = 10$ 12

10. Find the remainder

$2^5 \times$

32

$$\frac{2^{96}}{96}$$

$2^5 \times 2^{91}$

$2^5 \times 3$

$\frac{2^{91}}{3}$ $R = -1$

(-1)

$3-1 = 2 \times 32 = 64$ R

$96 = 2^5 \times 3$

2 | 96
2 | 48
2 | 24
2 | 12
2 | 6
3

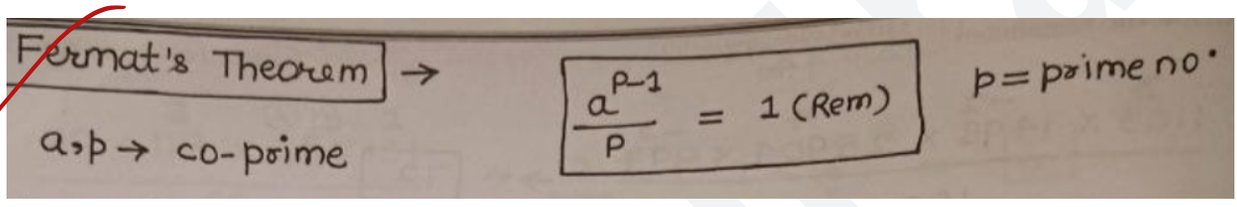
11. Find the remainder

$\frac{2^{34}}{5}$

$\frac{2^{35}}{10}$

12. Find the remainder

$\frac{5^{500}}{500}$



1. Find the remainder

$\frac{38^{102}}{103}$

2. Find the remainder

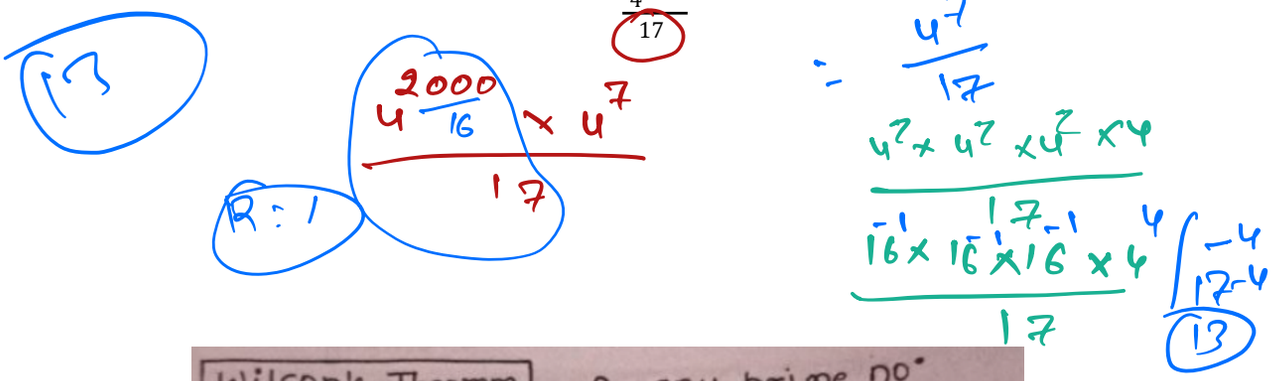
$\frac{64^{30}}{31}$

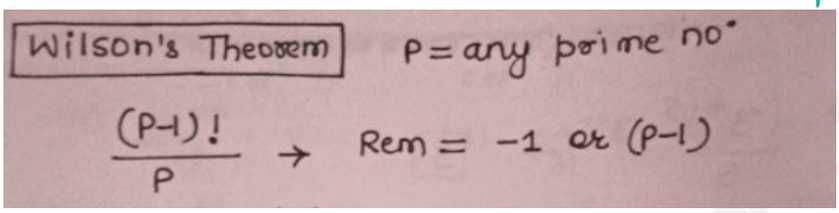
3. Find the remainder

$\frac{72^{85}}{29}$

4. Find the remainder

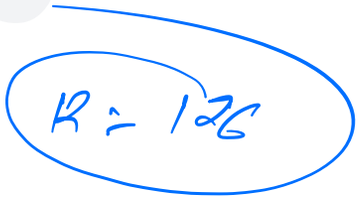
$\frac{4^{2007}}{17}$





1. Find the remainder

$\frac{(126)!}{127}$



2. Find the remainder

$\frac{(190)!}{191}$