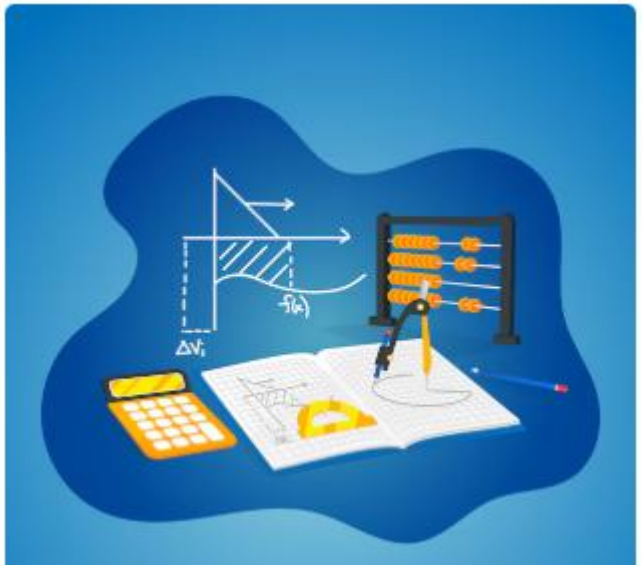
PW SKILLS | Aptitude Training

Quantitative Aptitude:
Number Systems

Remainders

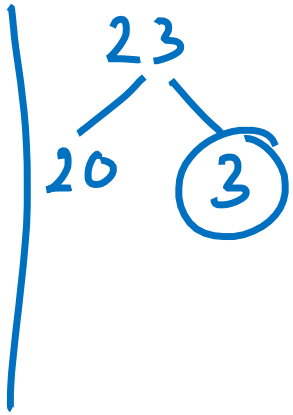
Remainders: Fundamentals



What is Remainder

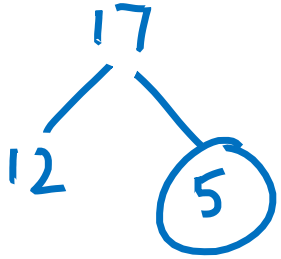
i) 23 ÷ 5

$$5\overline{)23}\,(4$$
$$-20$$
$$\overline{3}$$



ii) 17 ÷ 6

$$6\overline{)17}\,(2$$
$$-12$$
$$\overline{5}$$



Finding Remainder: Addition

i) $\frac{12 + 34}{11}$

$\frac{46}{11}$

46

44 (2)

$\frac{12}{11} + \frac{34}{11}$

R → 1 + 1

= 2

ii) $\frac{17 + 28 + 75}{6}$

R → 5 + 4 + 3

= 12

75 ⇒ $\frac{12}{6}$ R → 0

60 15

12 3

iii) $\frac{38 + 71 + 86}{16}$

R → 6 + 7 + 6 = 19

$\frac{19}{16}$ R → 3

86

64 22

16 6

Finding Remainder: Multiplication

i) $\frac{12 \times 34}{11}$

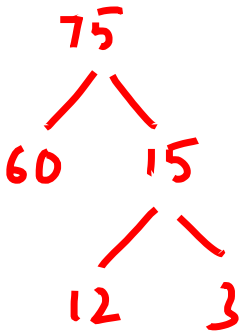
$R \rightarrow 1 \times 1$

$= 1$

ii) $\frac{17 \times 28 \times 75}{6}$

$R \rightarrow 5 \times 4 \times 3 = 60$

$\Rightarrow \frac{60}{6} \; R \rightarrow 0$



iii) $\frac{38 \times 71 \times 86}{16}$

$R \rightarrow 6 \times 7 \times 6 = \frac{36 \times 7}{16}$

$R \rightarrow 4 \times 7 = \frac{28}{16}$

$R \rightarrow 12$

Finding Remainder: Mix

i) $\frac{12 \times 34 + 56}{11}$

$\rightarrow 1 \times 1 + 1$

$= 1 + 1 = 2$

ii) $\frac{17 \times 28 + 75 \times 66}{6}$

$\rightarrow \frac{5 \times 4 + 2 \times 0}{6}$

$= \frac{20 + 0}{6} = \frac{20}{6} \rightarrow R\ 2$

iii) $\frac{38 + 71 \times 86}{16}$

$\rightarrow 6 + 7 \times 6 = 6 + 42$

$= \frac{48}{16} \rightarrow R\ 0$

What you'll learn:

$$\frac{1234567^{81} \times 369^{135} + 654^{999!}}{5}$$

Thanks!