Estimation in Sum or Difference

Example Estimate each of the following using the General rule:

(a) $730 + 998$ (b) $28,292 - 21,496$

(a) Let rounding of the nearest hundred

730 is rounded off to 700.

998 " " " " 1000

∴

estimated sum 730 and 998

$= 700 + 1000$

$= 1700$.

MJ

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(b) 28,292 - 21,496

Lets round off to the nearest thousand

28292 is rounded to 28000.

21496 " " " 21000.

∴ estimated difference = 28000 - 21000

= 7000

Estimation of Product

Example ① 74 × 189

rounding of 74 = 70

" " 189 = 200

Estimated product = 70 × 200

= 14000

Example - 2 5281 × 3849

5281 is rounded off to nearest thousand = 5000

3849 " " " = 4000

∴ Estimated product = 5000 × 4000

= 20,00,000

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Roman Numerals

1) It is one of the early system of writing numerals is the system of Roman Numerals.
2) This system is in many places eg. class, clock, numbering of Questions etc.
3) Roman numerals are expressed by seven letters of the alphabet.

Roman Numerals	I	V	X	L	C	D	M
Arabic Numerals	1	5	10	50	100	500	1000

Rules of the system

1) If a symbol is repeated, its value is added as many times as it occurs: ie, II equal 2, XX is 20, XXX is 30.
2) A symbol is repeated three times but not more than that. However, the symbol V, L and D are never Repeated.
3) If a symbol of smaller value is written to the right of a symbol of greater value, its value gets added to the value of greater Symbol

VI = 5+1 = 6

XII = 10+1+1 = 10+2 = 12

LXV = 50+10+5 = 65

4) If a Symbol of smaller value is written to the left of a Symbol of greater value, its value is Subtracted from the value of the greater Symbol.

IV = 5-1 = 4

IX = 10-1 = 9

XL = 50-10 = 40

XC = 100-10 = 90

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(5) The symbols V, L and D are never written to the left of a symbol of greater value,
ie V, L and D are never subtracted.

* The symbol I can be subtracted from V and X only.
The symbol X can be subtracted from L, M and C only.

Example Write in Roman
(a) 69 (b) 98

(a) 69
$\Rightarrow 60 + 9$
$\Rightarrow (50+10)+9$
$\Rightarrow LX + IX$
$\Rightarrow \underline{LXIX}$

(b) 98
$\Rightarrow 90 + 8$
$\Rightarrow (100-10)+8$
$\Rightarrow XC + VIII$
$\Rightarrow \underline{XCVIII}$

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