5·2

(i) write the following babylonian numerals as hindu arabic

① <YY <Y = 12×60 + 11×1
= 720 + 11 = 733

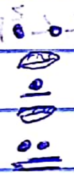
③ ~~YY~~ YY <<YYYY <<YYYYYYY = 2×3600 + (20 - 4)×60 + 27×1
= 7200 + 960 + 27 = 8187

✓ write each Using babylonian notation

⑨ 123,485 = <~~<<<YYYY~~ ~~<<YYY~~
≥ <<<YYYY <<YYY YYYYY

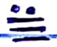
(11) 188 289
= <<< <<<YY <<YYY <YY

✓ Translate moyan numerals to Hindu arabic

(15)  2 × 2880000
~~0 × 144000~~ 0 × 144000
6 × 7200
~~60 × 720~~
0 × 360
= 12 × 1

= 5760000 + 43200 + 12 = 58032~~1~~12

15 write each number into moyan notation.

(17) 17 = 

✓ what does 5 represent in each of the following numerals

(21) 37,521 - It represent Change, evaluation or mobility.

✓ write Using expanded notation.

(27) 278063 = 200000
+ 70000
+ 8000
+ 0
+ 60
+ 3

✓ Write each number using standard Hindu arabic notation:

(31) $5\times10^3+3\times10^2+6\times10^1+8\times10^0$:

$= 5000 + 300 + 60 + 8 = \underline{5368}$

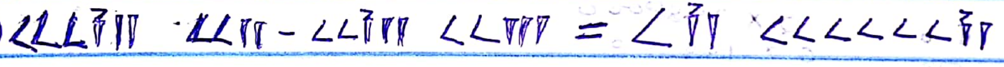
✓ Write using standard expanded notation:

(35) $8\times10^2+3\times10^2+6\times10^2 = 17\times10^2 = 1\times10^3+7\times10^2$

✓ Perform using expanded notation:

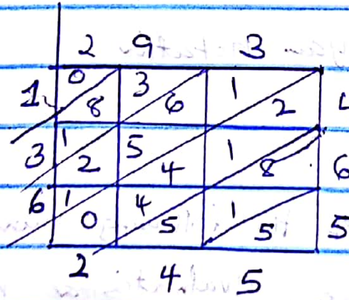
(39) $3482 + 2756 = 6238$

$= 3000 + 400 + 80 + 2 \quad + \quad 2000 + 700 + 50 + 6 \quad = \quad 6000 + 200 + 30 + 8$

(47) 

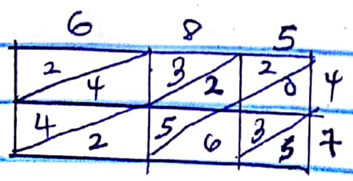
✓ Use the galley method

(51) 293×465


2
9
3
0
8
3
6
1
2
4
1
2
5
4
1
8
6
1
0
4
5
1
5
5
1
3
6
2
4
5

$= 13\,6{,}245$

(53)


6
8
5
2
4
3
2
2
0
4
4
2
5
6
3
5
7

5.3

List the numbers that Preceed and follow each of the following

3 1011_2 = 11

~~Another~~ Anomber that follow = 12

that Preceed = 13

✓ write each number as bas 10 numeral

⑦ $432_5 = 117_{10}$

⑨ $504_6 = 184_{10}$

⑪ $100111_2 = 39_{10}$

13 $1110101_2 = 117_{10}$

15 $267_8 = 183_{10}$

⑰ $704_8 = 452_{10}$

(19) $2F4_{16}$ = ~~756_{10}~~ 692_{10}

㉑ $D08_{16}$ = 2~~160_{10}~~ 232_{10}

✓ Convert each decimal number to a numeral in the given base

㉓ 334 base 5 = 2314_5

(25) 1838 base 6 = 12302_6

(27) 103 base 2 = 1100111_2

(29) 94 base 2 = 1011110_2

㉛ 3403 base 8 = 6513_8

㉝ 2792 base 16 = $AE8_{16}$

(35) 3562 base 16 = DEA_{16}

Perform each addition or Substraction'

㊳ $3412_5 + 231_5 = 4143_5$

(39) $2735_9 + 3246_9 = 6082_9$

㊶ $5415_7 + 2436_7 = 3786_7$

㊷ $2A18_{16} + 43B_{16} = 2F54_{16}$

(45) $11011_2 + 10101_2 = 110000_2$

(47) $2412_5 - 324_5 = 2041_5$

(49) $4263_7 - 2436_7 = 1524_7$

(51) $A88_{16} - 43B_{16} = 747_{16}$

(53) $111011_2 - 10101_2 = 100110_2$

✓ Write each binary number first as an octal number and then as hexadecimal

	octal		hexadecimal
(63) 1011101101_2 →	1355_8	=	$2ED_{16}$
(65) 1111101001_2 =	1751_8	=	$3E9_{16}$

✓ Write each number as binary number.

(67) $246_8 = 10100110_2$

(69) $A3E_{16} = 101000111011_2$

(71) Convert 3524_8 to hexadecimal

$3524_8 = 754_{16}$

(73) Convert $3AC_{16}$ to octal

$3AC_{16} = 1675_8$

(81) If $1435_a = A65_b$ which base is larger.

Its Clear that $A65_b$ $b=16$

and $a =$ base 13

$16 > 13$

b is larger than a.

(83) If $2051_b + 1434b = 3225_b$ what is b.

$b = 5$