POLYNOMIAL ADDITION BY DOT METHOD
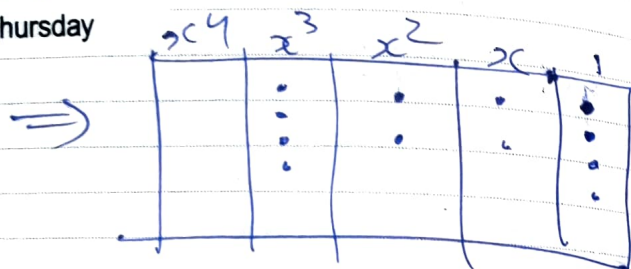
1) $(2x^2 + 1) + (4x^3 + 2x + 3)$
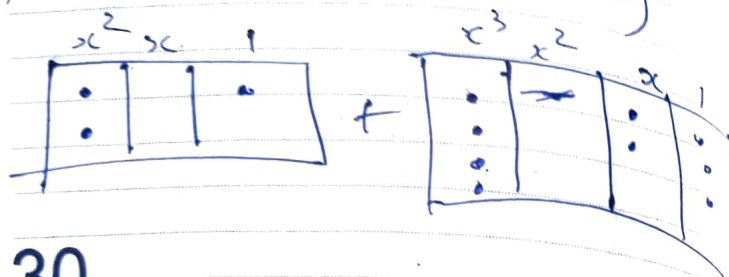
$\Rightarrow 4x^3 + 2x^2 + 2x + 4$

2) $(x^2 + 3x - 3) + (x^3 - 2x^2 - 2x + 1)$
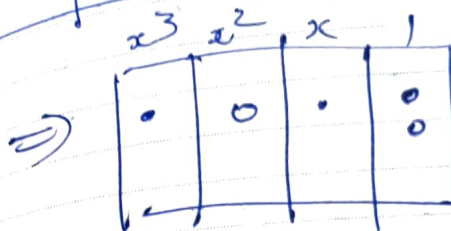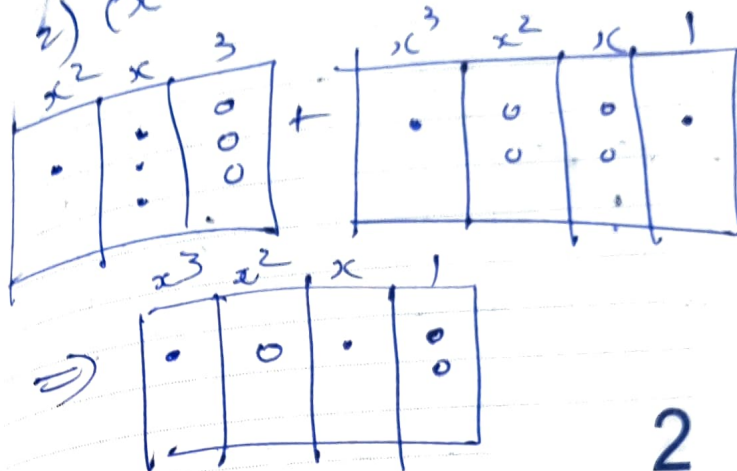
Note: o and • will cancel out each other

$\Rightarrow x^3 - x^2 + x - 2$

OCT 2017	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
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	22	23	24	25	26	27	28	29	30	31											

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	21	22	23	24	25	26	27	28	29	30	31											

3) No. of dots in column 1 will be 5. It won't change.

$$\boxed{\text{POLYNOMIAL CALCULATION BY DOTS — I.}}$$

1) $2x^2 + 7x + 6 \div x + 2$
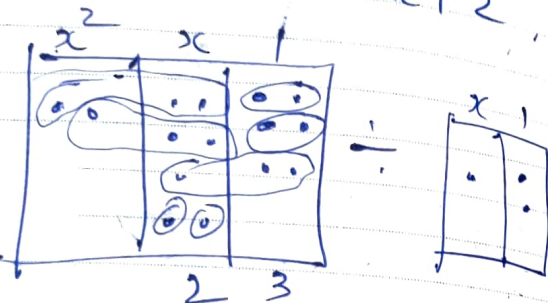
So, answer is $\underline{2x + 3}$

- The pattern is 1 dot & 2 dots which can be vertical or horizontal.

- Since there are three terms 3 column will come in $2x^2 + 7x + 3$

and since there are 2 terms in $x + 2$, 2 columns will come —

2) $(x^2 + 3x + 2) \div (x + 1)$

∴ Answer is $\underline{x + 2}$

OCT 2017

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DEC 2017
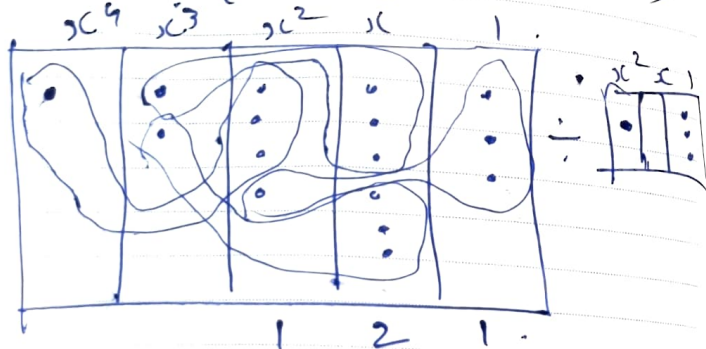
POLYNOMIAL DIVISION
BY DOTS — II

1) $(2x^2 + 6x) \div (x+2)$

2

Answer: $2x$

2) $(x^4 + 2x^3 + 6x^2 + 6x + 3) \div (x^2 + 3)$

1   2   1.
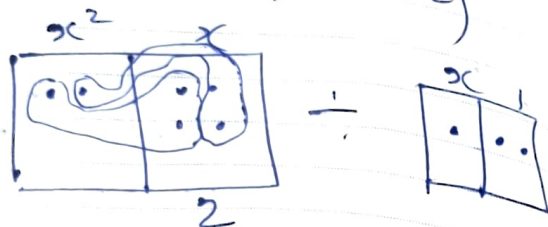
So, Answer is
$x^2 + 2x + 1$.

POLYNOMIAL DIVISION
BY DOTS — III
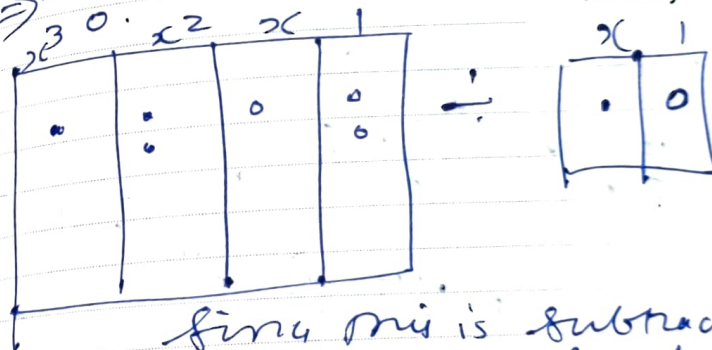
1) $(x^3 + 2x^2 - x - 2) \div (x-1)$

⇒ +ve terms are shown as ●

⇒ -ve terms are shown as ○

Since this is subtraction.
Sign in polynomial expression
we add antidots.

$x^3 \quad x^2 \quad x \quad 1$
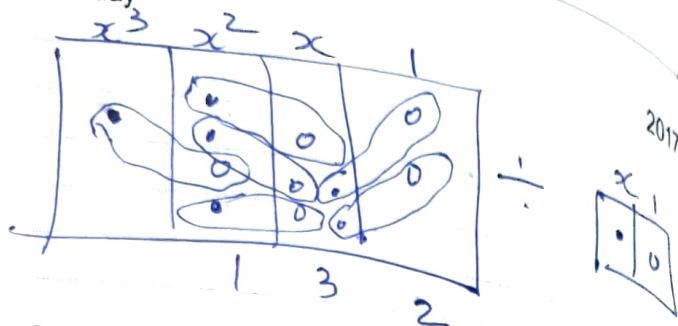

2017

$$1 \quad 3 \quad 2$$

So, answer is
$$x^2 + 3x + 2$$

2) $(x^3 - 3x + 2) \div (x + 2)$

$x^3 \quad x^2 \quad x$

$$1 \quad -1 \quad 1$$
$$-1$$

Answer is: $x^2 - 2x + 1$

2017

1) In column 2, we add 2 dots and to cancel out eachother, so, we add 2 anti dots as well.

2) In column 3, we add 1 dot and 1 anti dot as well to cancel out eachother.

3) If the pattern is say, for example

, then

if we use ,

then it would be counted as -1.

OCT 2017

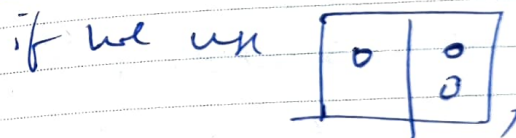| Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat
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DEC 2017

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POLYNOMIAL MULTIPLICATION USING DOTS
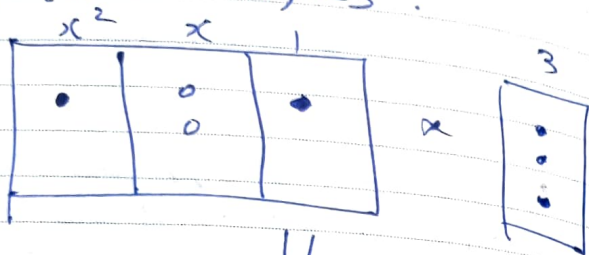
2017

1) $(x^2 - 2x + 1) \times 3$.

1 Copy of 3 dots · 2 Copies of 3 Anticlots · 1 Copy of 3 dots

$\Rightarrow 3x^2 - 6x + 3$

2017

2) $(x^2 - 2x + 1) \times (-3)$

1 Copy of 3 Anticlots · 2 Copies of 3 Dots · 1 Copy of 3 Anticlots
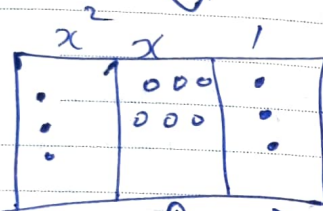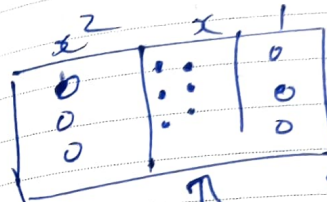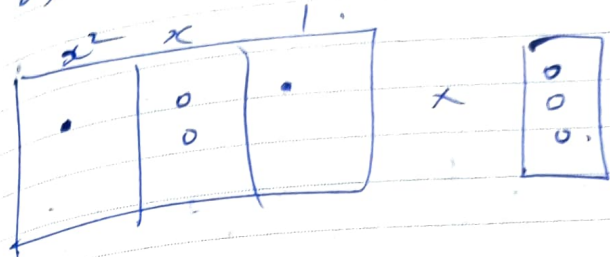
$\Rightarrow -3x^2 + 6x - 3$

OCT 2017

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DEC 2017

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17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	-	-	-	-	-	-

POLYNOMIAL SUBTRACTION BY POT METHOD

1) $(3x^2 + 2x) - (4x^2 + 5x)$

$$3 \quad x^2 \quad x \quad 1$$

$$x^3 \quad x^2 \quad x \quad 1$$

$$x^2 \quad x \quad 1$$

$\Rightarrow -x^2 - 3x$

Note: o and • will cancel out eachother.

2) $(x^3 + 3x^2 + 2x - 1) - (2x^2 + x - 2)$

$$x^3 \quad x^2 \quad x \quad 1 \qquad x^2 \quad x \quad 1$$

$$x^3 \quad x^2 \quad x \quad 1$$

$\Rightarrow x^3 + x^2 + x + 1$

Note: o and • will cancel out eachother.

NOV 2017

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19 20 21 22 23 24 25 26 27 28 29 30 - - - - - - -

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JAN 2018