Dear Parents / Students

Due to the unprecedented situation, Knowledgeplus Training center is mobilized and will keep accompanying and supporting our students through this difficult time. Our Staff will be continuously, sending notes and exercises on a weekly basis through what's app and email. Students are requested to copy the notes and do the exercises on their copybooks. The answers to the questions below will be made available on our website on knowledgeplus.mu/support.php. Please note that these are extra work and notes that we are providing our students and all classes will be replaced during the winter vacation. We thank you for your trust and are convinced that, together, we will overcome these troubled times.

Knowledgeplus Training Center

Mathematics

Garde 9

Week 4

Notes and Exercise

Note: (All the Notes, Examples and Exercise are on the photos and Note: (Please copy all the Notes, Examples and Exercises on your copy book).

	Muthematico Grade 9 week 4
<u></u>	Quan drate
- (1)	Quandratic Factorisation of ant + bn (c=0)
('/-	Enample
	En physica
(a)	Factoriso 2n2+3n (b) 3n2-6n (c) 14n-7n2 Solution
(- (/	Seele bis and and see the seelest and see the seelest and
Car	2n2+3n = 2 (2n+3) Atway remove commones
(1/	numbers of common
	Alphahets In this case
	er is common
1	- (24) (2-4)
(6)	3n2-6n = 3n(n-2n) In this case 32 is
	(8-2 s) = Command - 10 (5)
	(6-4) - Commang - 10 (5)
(c)	14n-7n2= In(2-n) In this case In is
-	Common William
	factorisation - Rut in propolate
	Exercise (2(n+1) 2n+2?
	2(n+1) 2n+2
	10-2"11 (D) 31 -2 K 13 1 -2 h (P)
	Expansion Remove bradeels
	(6) 2x2-50 (f) 23-32 (f) x2-3.
	Exercise 1
(a)	22+5n (b) 22-6n (c) 5n-1322
61	$2n^2 + 8n$ (e) $3n^2 - 12n$ (f) $-6n^2 + 3n$
1.4	
(g)	-4-10n2 (h) 2n 27n2-182e

	Factorisation of 22-12
	14 May Start 1
	$n^2 - y^2 = (n + y)(n - y)$
	Symple
	Example
2.	Factorise ()
Can	x2-25 (b) 49-x2 (c) 2x2-18
	22-25= 22 2-52 (State) = (8+5 mg 18)
	= (n+5) (n -5)
~ 11	Phabell later
(6)	$49-x^2=7^2-x^2$
1	-(71x)(7-n)
17 5	(8) 3M2-1/2 = 34/21-24) /+ 1/21 (185 - 3)
(c)	2n2-18 - 222- 2 (n2-9)
	= 2(x+3) (n-3)
	12 14x - 30x2 - 3x (2-x) (- 1/2 (21 2)
	Exercise
loston	Factorise
	n2-49 (b) y2-1 (c) 36-n2
	, Zr 465 a. // // // // // // // // // // // // //
(2)	y2-1 (e) x2-16 (x) 4x2-81
colcet	
(9)	2n²-50 (h) 27-3n² (i) x²-2½
())	(n+2) 2-36 (/c) (2x-3)2-1
58 5	(2) 2112 = 811 (c) 522. 121 (f)-Ex2

	Factorisation of and the to
	All the second s
	Recull theet (212) (213) = 2(213) +2 (213)
	(212) (213) = 2(213) +2 (213)
	$\sim 212+311+211+6$
3	- 11 - 11 - 11 - 11 - 11 - 11 - 11 - 1
	Thus the factorisation of 222+5n+6 ss (n+2)(2+3)
	11 C 2 (11 40) (2 4 40) F 2 11
	Example
las	Example 12 + 9n + 20 (b) n2 - In + 10
	Solution (sen) 1 - (sen) 18
	22+94+20= 2 + 4x +5x +20 P-axc=1x20=20
1	$= \chi(\chi + \eta) + 5(\chi + \eta) \qquad \qquad 5 = b = 9$
	= (x+4) (x+5) f = 4,5
<i>C</i> .	Fertherise Comments
(6)	$n^2-7n+io = n^2-2n-5n+io$ $P=10$
	= n(n-2)-5(n-2) $S=-7$
	= n(n-2) - 5(n-2) S = -7 $= (n-2)(n-3) F = -2, -5$
-	P= Product of a and a mission ()
	S = Sum = b an + cby +C
	521 - 11 1 - 111 C. 1 Sam 3-18- 18
	S = Sum = b ar + thuy + c F = Factor: Fre factor It must be the factor
	when that you multiply you get the product
	when that you multiply you get the product and the factor that you add (sum) you get
	the sum.
	Exercise: Factorise
(a.	1 x2+4n+3 /b) x2+8n+15 (c) x2+1cn+16
(
(d)	$12 n^2 - 7n + 12$ (e) $n^2 - 732 + 30$
F	-
(x)	$n^2 - 2n + 1$
	(3)

Complete technisation of an thate	
Enamanla	
Factorise Completely (a) $2n^2 + 6n + 4$ (b) $3n^2 - 15n + 18$	
raenvise Completely	
(a) 2n + 6n +4 (b) 3n2-15n +18	
Solution.	
(a) 2n2+6n+4 -2n2+2n+4n+4 P=2x4-8	
=2n(n+1)+4(n+1) $S=6$	
-(n+1)(2n+4) $F=2,4$	
(61 32 -15x418=32-62-62-92418 P=3x18=54	
= 3k(n-2)-9(n-2) Sx-15)
(2i-2) (3n-9) F= 78 \$26-9	
Pada Turntar Land &.	
Frencits (This white):	
(a) 2n2+10n+12 (b) 3n2-18n+24	
(a) 2n2+10n+12 (b) 3n2-18n + 24	
(c) 5x2+40x-45 (d) 4x2-12x-40	
6) (2) (0) 7.2 1	-
(e) Gn2-tphy2n+72 (f) 7n2-14n-105	
12 HOVE KIND 4 - WING 22	1
g) 3n²-3n-60 (h) 4n²+4n-120	
To to the facility mand by the techno	
(i) 5n2-20x-60,	
a modelle to the transfer of and level day out	