Work Sheet – 01 (Higher				c) 6,3 d) 12,6			
Mathematics) for class – Nine				The summation of areas of two			
(22.00.2020) Chapter Five				squares is $25 \text{ m}^2$ and the rectangle			
	(22.09.2020), Chapter- Five,			formed by their sides has an area of $12^{2}$			
Exercise- 5.5				$12 \text{ m}^2$ . Answer to the following			
Equation			Q	$\begin{array}{c} \text{ questions No. (9-11):} \\ \text{ What is the length of the side of the} \end{array}$			
<b>Creative Multiplication Choice Questions</b>				smaller square? [C.B 15]			
The system of equations: $a^{x+3} = a^y \cdot a^{-y}$ and				a) 6 m b) 5 m			
<b>x</b> + <b>y</b>	$\mathbf{x} + \mathbf{y} = 1.$			c) 4 m d) 3 m			
1.	What is the va	lue of x? [D.B 20]	10.	What is the ratio of the areas of the			
	a) 3	b) 4		squares? [C.B 15]			
	c) -3	d) -5		a) 25:16 b) 16:9			
2.	What is the va	lue of y? [D.B 20]		c) 9:4 d) 4:3			
	a) -2	b) -3	11.	The perimeter of a rectangular			
	c) 4	d) 6		garden is 20 metres and length is 8			
3.	Which one is a $2^{2}$	solution of $x^y = y^2$ and		metres. What is the area of that			
	$y^{2y} = x^{4}$ then	where $x \neq 1$ ? [J.B 20]		garden: [Ctg.B 15]			
	a) $(2, -2)$	b) $(2, 1)$		a) o sq. metres b) 10 sq. metres			
	C)  (Z, Z)	a) $(-2, -2)$	12	In the case of a proper fraction then			
l	Answer to the que	estions inc. $(4 - 5)$ based	12.	which one is correct?			
, t	in the following h	$\frac{x}{x} = y$ then		a) Numerator $> Denominator$			
4.	What is the va	lue of $\left(\frac{x}{y}\right)^{y}$ ? [D.B 16]		b) Numerator < <i>Denominator</i>			
	$\frac{x}{x} - 1$	b) $\frac{y}{y^2} = 1$		c) Numerator = Denominator			
	a) $x^{y}$	$\begin{array}{c} 0 \\ x \\ y \end{array}$		d) Numerator $\neq$ Denominator			
	c) $x^{1}\overline{y}$	d) $x^{1-\overline{x}}$	13.	The perimeter of a rectangle is 8			
5.	If $x = 2y$ then y	y = What? [D.B 16]		meters more than the sum of its			
	a) 2	b) 3		diagonals. If the area enclosed by the			
	c) 4	d) 5		rectangle is 48 square metre then			
	The difference of squares of two			what is the length of its diagonal: $a) - \frac{14}{2}m$			
	A nerver to the	following questions No.		c) $10 \text{ m}$ d) $8 \text{ m}$			
	Answer to the $(6-7)$ .	Tonowing questions ivo.		If a number of two digits is divided by			
6.	What is the su	m of the squares?		the product of its digits, the quotient			
		[ <b>R.B</b> 16]		is 2. When 27 is added to the number,			
	a) 10	b) 13		the digits in the number change their			
	c) 17	d) 25		places. According to the data answer			
7.	What is the sq	uare of the sum?		the question give to (11 - 13):			
		[ <b>R.B</b> 16]	14.	If unit place digit is x and tenth unit			
	a) 9	b) 16		placed digit is y. According to the			
	c) 25	d) 36		condition which of the following is			
8.	The addition	addition of squares of two		correct?			
number is 90 and product is 27. What				a) $10y + x = 2xy$			
	are the two numbers? [Dj.B 16]			b) $2(10y + x) = xy$			
	a) 9,3	b) 9,6		c) $10x + y = 2xy$			
				a) $2(10x + y) = xy$			

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15.	What will be the cond	23.	If the su	
	digits in the number		is 170 an	
	places?			differenc
	a) $(10x + y) + 27 = (1)$	.0y + x)		numbers
	b) $(10x + y) - 27 = (1)$	.0y + x)		a) 70
	c) $(10x + y) + 27 = (1)$	0x + y		c) 78
	d) $(10x + y) - 27 = (1)$	24.	If the sur	
16.	What will be value of un		is 181 an	
	a) $\frac{5}{2}$ b)	3		is 90 ther
	c) 4 d)	6		two num
	Answer to the question	s no. (17 – 18)		a) 271
	on the basis of the info	ormation given		c) 400
	below: The difference	25.	What is t	
	of two positive whole		numbers	
	and the product of the r	numbers is 30.		squares
17.	What are the numbers?			numbers
	a) 1 and 30 b)	2 and 15		numbers
	c) 5 and 6 d)	5 and – 6		a) 1
18.	What is the sum of the	squares of the		c) 4
	numbers?		26.	If the len
	a) 31 b)	42		x then w
	c) 51 d)	61		the leng
19.	If the difference of so	quares of two		side?
	numbers is 144 and th		a) (1 –	
	65 then what are these t		c) x	
	a) 6.5 b)	12.5	27.	The lengt
	c) 13.5 (d)	12.13	-/.	to the
20.	The length of a rectang	le is ten metres		garden
	less than the twice of		the recta	
	the breadth is x metre t	hen what is the		respectiv
	length?			square g
	a) $2x - 10$ b)	2x + 10		a) Xv
	c) $x - 10$ d)	x + 10		$a) x^2 + y$
21.	The length of a rectan	gular region is	20	
	23 metres more than t	28.	Ine sum	
	breadth. If breadth is		numbers	
	what is the length?			numbers
	a) $2x - 23$ b)	2x + 23		Ionowing
	c) $x + 23$ d)	x - 23		a) 9,13
22.	The length of a d	iagonal of a	20	c) 15,5
	rectangular region is 10	) metres. If the	29.	what a
	length and breadt	th of that		differenc
	rectangular region are		positive v	
	then which is the value			
	a) 10 b)	20		a) $1 \text{ and}$
	c) 100 d)	200		c) 5 and
	u)			

If the sum of squares of two numbers is 170 and their product is 77 then the difference of the squares of these two numbers is – a) 70 b) 72

c) 78 d) 82

- 24. If the sum of squares of two numbers is 181 and the product of the numbers is 90 then what is the square of sum of two numbers?
  - b) 361
  - c) 400 d) 625

25. What is the sum of the squares of the numbers for the difference of the squares of two positive whole numbers is 9 and the product of the numbers is 20?

- b) 5
  - d) 41
- 6. If the length of one side of a square is x then what is the difference between the length of diagonal and its one side?

a) 
$$(1 - \sqrt{2})x$$
  
b)  $(\sqrt{2} - 1)x$   
c) x  
d)  $\sqrt{2}x$ 

- 27. The length of a square garden is equal to the diagonal of a rectangular garden. If the length and breadth of the rectangular garden are x and y respectively then what is the area of square garden?
  - a) Xy b) 2(x+y)c)  $x^2 + y^2$ d)  $\sqrt{x^2 + y^2}$
- 28. The sum of squares of two positive numbers is 250. If the product of the numbers is 117 then which of the following are two numbers?
  - a) 9,13 b) 25,10
    - c) 15,5 d) 3,39
- 29. What are the numbers for the difference of the squares of two positive whole numbers is 11 and the product of the numbers is 30?
  a) 1 and 30
  b) 2 and 15
  - a)  $1 \operatorname{and} (50 ) = 0 / 2 \operatorname{$ 
    - 5 and 6 d) 5 and 6