



INDIAN SCHOOL AL WADI AL KABIR

Class VIII, Mathematics

WORKSHEET-FACTORISATION (MCQ)

Multiple Choice questions

Q.1.	The common factor of x^2y^2 and x^3y^3 is						
A	x^2y^2	B	x^3y^3	C	x^2y^3	D	x^3y^2 .
Q.2.	The factorisation of $12a^2b + 15ab^2$ is						
A	$3a^2b(4a + 5b)$	B	$3ab(4a + 5b)$	C	$3ab^2(4a + 5b)$	D	$3a^2b^2(4a + 5b)$.
Q.3.	The factorisation of $4y^2 - 12y + 9$ is						
A	$(3y - 2)^2$	B	$(2y - 3)^2$	C	$(3y + 2)^2$	D	$(2y + 3)^2$
Q.4.	The value of 99^2 is						
A	$90^2 + 2 \times 90 \times 9 + 9^2$.	B	$90^2 - 2 \times 90 \times 9 + 9^2$	C	$90^2 + 9^2$	D	none of these.
Q.5.	If $x^2 - x - 42 = (x + k)(x + 6)$, then $k =$						
A	6	B	-6	C	7	D	-7
Q.6.	The factorisation of $10x^2 - 18x^3 + 14x^4$ is						
A	$2(7x^2 - 9x + 5)$	B	$2x(7x^2 - 9x + 5)$	C	$2x^2(7x^2 - 9x + 5)$	D	$2x^3(7x^2 - 9x + 5)$
Q.7.	Which of the following is quotient obtained on dividing $-18xyz^2$ by $-3xz$?						
A	$6yz$	B	$-6yz$	C	$6xy^2$	D	$6xy$
Q8.	On dividing $26xy(x + 5)(y - 4) \div 13xy(y - 4)$						
A	$2y(x+5)$	B	$2(x+5)$	C	$2y$	D	$3x$
Q9	The quotient of $12a^8b^8 \div (-4a^6b^6)$ is						

	A	$3a^2b^2$	B	$3a^2b$	C	$3ab^2$	D	$-3a^2b^2$
Q10	The common factor of $36p^2q^3x^4$, $48pq^3x^2$ and $54p^3q^3x^4$ is							
	A	$36pq^3x^2$	B	$6pq^3x^2$	C	$54pq^3x^2$	D	$48pq^3x^2$
FILL IN THE BLANKS								
Q11	$6m - 42$ can be factorized as-----							
Q12	The factors of $16x^4 - y^4$ -----							
Q13	The common factor of $2x$ and y is -----							
Q14	The factors of $6xy - 4y + 6 - 9x$ are -----							
Q15	Factors of $p^2 + 7p + 12$ is-----							
<p>CASE STUDY: Two friends Rahul and Madhav start a business together. They decide to share their capital depending up on the variable expenditure. The capital of two partners together is given by $y^2 - 5y - 36$ which is the product of their individual share factors. On the basis of above information, answer the following questions</p>								
								
Q 16	If the value of y is 5000, then the capital of their business is							
	A	2,59,75,964	B	2,49,85,964	C	2,49,75,964	D	2,49,75,694
Q 17	The factors of $y^2 - 5y - 36$							
	A	$(y + 9)(y - 4)$	B	$(y - 9)(y + 4)$	C	$(y - 9)(y - 4)$	D	$(y + 9)(y + 4)$
Q 18	In between Rahul shared the amount $y^2 + 3y + 1$ more, then their present capital of the business is							
	A	$2y^2 - 2y + 35$	B	$2y^2 - 2y - 35$	C	$2y^2 + 2y + 35$	D	$2y^2 + 2y - 35$
Q 19	The profit they earned is $x^2 + 18x + 81$. The factors of $x^2 + 18x + 81$.							
	A	$(x + 9)(x + 9)$	B	$(x + 9)(x - 9)$	C	$(x + 9)(x + 2)$	D	$(x + 3)(x + 3)$
Q 20	If the value of y is 2500, then the profit of their business is							
	A	62,55,061	B	62,95,061	C	62,59,061	D	62,95,661

ANSWERS

1.	A) x^2y^2	2.	B) $3ab(4a + 5b)$	3.	D) $(2y + 3)^2$	4.	A) $90^2 + 2 \times 90 \times 9 + 9^2$.
5.	D) -7	6.	C) $2x^2(7x^2 - 9x + 5)$	7.	A) $6yz$	8.	B) $2(x+5)$
9.	D) $-3a^2b^2$	10.	B) $6pq^3x^2$	11.	$6(m-7)$	12.	$(4x^2+y^2)(2x+y)(2x-y)$
13.	1	14.	$(2y-3)(3x-2)$	15.	$(p+4)(p+3)$	16.	D
17.	B	18.	B	19.	A	20.	B