ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Algebra & Geometry **Work sheet 6 answer key**

Marks:15 **Algebraic Identities**

Date:23.11.20

Answer all the following questions(1×15=15)

1.(x-4)(x+3)= _____

A)x^2-x-12

B)x^2-x+12

C)x^3+x-1

D)none of these

2. $(2y-3)^2$ =

A) $4y^2+6y+9$

B) $4y^2-12y+9$

C) $4y^2+9$

D) none of these

3. $(a+b)^2 + (a-b)^2$ = _____

A) **$2(a^2+b^2)$**

B) 2ab

C) ab

D) None of these

4.What must be added to x^2+2x to make it a perfect square

A)-1

B)9

C) 1

D)0

5. $(101)^2$ = _____

A) 10201

B) 10021

C) 1101

D) 1001

6. If a-b=3, ab=4, find a+b

A) 5,-5

B) 1

C) -1

D) none of these

7. Find ab, if a+b=10 , a-b=2

A) 6

B) 24

C) 42

D) 2/3

8. If $x + 1/x = 3$, find $x^2 + 1/x^2$

A) 11

B) 12

C) 7

D) 0

9. $(x^2-y^2)(x^2+y^2)$= _____

A) $x^4 - y^4$

B) $x^4 + y^4$

C) x^3+y^4

D) none of these

10. Find the value of 52×48

A)2496

B)996

C)1964

D)962

11. $103^2 - 97^2$ = _____

A) 12000

B) 1200

C) 2000

D) none of these

12. 67×67 – 13×13 = _____

A) 3740

B) 7400

C) 4320

D) none of these

13. $(a+b)^2=(a-b)^2+\_\_\_ab$

A) 2

B) 4

C) 0

D) none of these

14. $(3a+2b^2)(3a-2b^2)=\_\_\_\_\_$

A) $9a^2-4b^4$

B) $9a-4b^2$

C) a^2+10b^3

D) none of these

15. $(2x-5)(4x+1)=\_\_\_\_\_$

A)$8x^2-18x-5$

B) $8x^2+9x+5$

C)$8x^2+x+7$

D)none of these

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