ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Algebra & Geometry Work sheet8

Marks:15Algebraic Identities

Date:30.11.20

Answer all thefollowing questions(1×15=15)

1.(x-a)(x+b)= _____

A)x^2+(b-a)x-ab
B)x^2-(a-b)x+ab
C)x^2+b-ax-a
D)none of these

2.$(a^2-b^2)^4$ =_____

A) (a+b)2$(a-b)^2$
B) $(a+b)^4(a-b)^4$
C) a^4-b^4
D) none of these

3.a^2+b^2= _____

A) $(a+b)^2+2ab$
B) $(a+b)^2-2ab$
C) $a^2 - b^2 +2ab$
D) $(a+b)^2-4ab$

4.What must beaddedto$x^2 + 1/x^2$to make it a perfect square?

A)0

B)2

C)6

D)5x

5. $(abc - a^2b^2c^2)^2$ = _____

A) $a^2b^2c^2 + a^4\ b^4\ c^4 - 2a^3b^3c^3$

B) $a^2b^2c^2 + a^4\ b^4\ c^4 + 2a^3b^3c^3$

C) $a^2b^2c^2 - a^4\ b^4\ c^4 - 2a^3b^3$

D) none of these

6.If $x+1/x = \sqrt{5}$, find $x - 1/x$

A) 1,-1

B) 2

C)3

D) 5

7.If $x^2 + 1/x^2 = 2, x^2 - 1/x^2 = -3$ find $x^4 - 1/x^4$

A) -6

B) 2

C) 4

D) 2/3

8.$a + b = 2$, $a - b = 4$ find b^2

A) 10

B) 12

C) 1

D) -1

9.$(2x^2-4y^2)(2y^2+3x^2)$= _____

A) $-8x^2y^2 +6x^4 - 8y^4$

B) $8x^2y^2 +6x^4 - 8y^4$

C) $8x^2y^2 -6x^4 + 8y^4$

D) none of these

10.If $x^2 - 6x +1 = 0$, find the value of $x^2 + 1/x^2$

A)34

B)43

C)64

D)96

11.If $x - 1/x = 2$, find the value of $x^2 - 2x – 1$

A) 1

B) 0

C) 20

D) none of these

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

A) $x^2+y^2+z^2+2xy-2xz-2zy$

B) $x^2-y^2+z^2+2xy-2xz-2zy$

C) $x^2-y^2+z^2+2xy-2xz+2zy$

D) none of these

13.$(a-b)^2=(a+b)^2-$___ab

A) 2

B) 4

C) 0

D) none of these

14.$(1/17a+0.4b^2)(1/17a-0.4b^2)=$_____

A) $1/289a^2- 0.16b^4$

B) $1/289a^2+0.16b^4$

C)$289a^2+0.16b$

D) none of these

15.$a^2+b^2=5$, $a^2-b^2=13$, a= ?

A)3, -3

B)4,-4

C)6

D)none of these

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