## VII Class

## ALGEBRAIC EXPRESSIONS

1. The letters which are used to represent numbers are called $\qquad$
2. The number which is 3 less than $y$ is $\qquad$
a) $3-y$
b) $y-3$
c) $-y-3$
d) $y+3$
3. The number which is 5 more than $\frac{1}{3}$ of a number ' $y$ '
a) $\frac{y}{3}+5$
b) $y+\frac{5}{3}$
c) $\frac{y+5}{3}$
d) $\frac{y}{3}-5$
4. The number which is 7 less than the product of the numbers ' $x$ ' and ' $y$ ' $\qquad$
a) $x y+7$
b) $-7+x y$
c) $-7-x y$
d) $-x y+7$
5. If 4 is added to $x$, it becomes $z$. Write ' $z$ ' in terms of $x$.
a) $\mathrm{z}+4=\mathrm{x}$
b) $x+4=z$
c) $z=x-4$
d) $x+z=4$
6. 3 more than twice a number $y$ is $\qquad$
a) $3 y+2$
b) $3-2 y$
c) $2 y+6$
d) $2 y+3$
7. ___ is a combination of numbers, literals and arithmetical operations.
8. Give an example of an algebraic expression. $\qquad$
9. If an algebraic expression consists of only one term, it is called a $\qquad$
a) trinomial
b) binomial
c) monomial
d) polynomial
10. If an algebraic expression consists of two terms, it is called a $\qquad$
a) binomial
b) monomial
c) trinomial
d) none
11. $2 x+3 y-z$ is an example of a $\qquad$
a) trinomial
b) binomial
c) monomial
d) none
12. When two expressions are said to be equal ? $\qquad$
13. In -18xyz; the numerical coefficient is $\qquad$
c) $y z$
d) $x y z$
14. In $2 x^{2} y^{3}$; the literal coefficient is $\qquad$
a) 2
b) $2 x^{2}$
c) $2 x^{2} y^{3}$
d) $x^{2} y^{3}$
15. In $5 x y^{2} z^{4}$; the coefficient of $5 x z^{4}$ is
a) $5 x y^{2} z^{4}$
b) $5 y^{2}$
c) $x y^{2} z^{4}$
d) $y^{2}$
16. When the terms have the same literal factors, they are called $\qquad$ terms
a) like
b) unlike
c) disjoint
d) none
17. In the expression $2 x y-2 x+7 x y+4 x z$, $\qquad$ and $\qquad$ are like terms.
a) $2 x$ and $7 x y$
b) $2 x y$ and $4 x z$
c) $2 x$ and $4 x z$
d) $2 x y$ and $7 x y$
18. In the expression $3 p q-4 q \mathrm{r}+8 \mathrm{pq}-7 \mathrm{st}$, $\qquad$ and $\qquad$ are like terms.
a) $3 \mathrm{pq} \&-4 q \mathrm{r}$
b) $4 \mathrm{qr} \& 8 \mathrm{pq}$
c) $3 p q \& 8 p q$
d) $8 \mathrm{pq} \& 7 \mathrm{st}$
19. In the following expressions, which pairs contain like terms?
a) $16 z, 18 x$
b) $17 x y,-8 x y$
c) $10 x y,-5 y$
d) $15 x^{2} y, 15 x y$
20. Write the coefficient of ' $x$ ' in -6xyz
a) 6
b) $6 x$
c) $-6 y z$
d) $-6 x y$
21. Coefficient of ' x ' in $\mathrm{x}-\mathrm{y}$ is
a) -1
b) 1
c) $x$
d) $y$
22. $3\left(x^{2}+y^{2}\right)$ and $3 y^{2}+3 x^{2}$ are $\qquad$ expressions
a) disjoint
b) equal
c) unequal
d) numerical
23. $3 p q+(-2 p q)+(-11 p q)=$ $\qquad$
a) 10 pq
b) 16 pq
c) -10 pq
d) -16 pq
24. $8 a b^{2}-\left(24 a b^{2}\right)=$ $\qquad$
a) $16 a b^{2}$
b) $-16 a b^{2}$
c) $32 a b^{2}$
d) $-32 a b^{2}$
25. $-9 \mathrm{x}^{2}+7 \mathrm{x}^{2}-16 \mathrm{x}^{2}=$ $\qquad$
a) $-25 x^{2}$
b) -18
c) $-18 x^{2}$
d) $-11 x^{2}$
26. The sum of $3 x+4 y-5 z, 5 y+2 x, 7 x-8 y \& 4 x-9 y-5 z$ is
a) $16 x-8 y-10 z$
b) $8 x-16 y-5 z$
c) $-16 x+8 y+10 z$
d) $-3 x+11 y+16 z$
27. on Subtracting $12 x y-5 y z-9 z x$ from $15 x y+6 y z+7 z x$ is $\qquad$
a) $-3 x y+16 z x$
b) $11 y z-3 x y-16 z x$
c) $3 x y+11 y z+16 z x$
d) $16 x y+11 y z+16 z x$
28. The sum of -abc, 13abc, 5abc is
a) 17
b) -17 abc
c) 18abc
d) 17 abc
29. $3 m^{2}-3 m n+8-\left(-m^{2}+3 m n\right)=$ $\qquad$
a) $2 m^{2}+3 m n+8$
b) $4 \mathrm{~m}^{2}+8$
c) $4 m^{2}+6 m n+8$
d) $4 m^{2}-6 m n+8$
30. What should be added to $3 x^{3}-2 x^{2}+5 x+1$ to get $x^{3}-2 x^{2}+4 x-1$ ?
a) $2 x^{3}+x+2$
b) $-2 x^{3}-x-2$
c) $2 x^{3}+x-2$
d) $4 x^{3}$
31. What should be added to $x^{2}+x y+y^{2}$ to obtain $2 x^{2}+3 x y$ ? $\qquad$
a) $x^{2}+2 x y-y^{2}$
b) $-x^{2}-2 x y+y^{2}$
c) $x^{2}+2 x y$
d) $3 x^{2}+4 x y+y^{2}$
32. What should be subtracted from $2 x^{2}-x y-5 y^{2}$ to make it $-5 x^{2}-3 x y-2 y^{2}$ ? [ ]
a) $7 x^{2}+2 x y+3 y^{2}$
b) $-7 x^{2}-2 x y+3 y^{2}$
c) $7 x^{2}+2 x y-3 y^{2}$
d) $-3 x^{2}-4 x y-7 y^{2}$
33. What should be subtracted from $-13 x+5 y-8 z$ to obtain $11 x-16 y+7 z$ ? $\qquad$ [ ]
a) $24 x-21 y+15 z$
b) $-2 x-11 y-z$
c) $-24 x+21 y-15 z$
d) $-8 x+7 y-13 z$
34. If $a=x-2, b=y+2$ and $c=-x+2 y$ then the value of $a+b+c$ is $\qquad$
a) $3 y$
b) $3 x+2 y$
c) $-3 y$
d) 0
35. If $a=2, b=3$ and $c=1$, find the value of $a^{2}+2\left(b^{2}+c^{2}\right)$ $\qquad$ [ ]
a) 20
b) 24
c) 12
d) 30
36. If $a=1, b=0, c=-1$, the value of $c^{2}-2 a b(b-a)$ is $\qquad$
a) 1
b) -1
c) 2
d) -4
37. If $x=0$ and $y=-1$, the value of $x+y+8$ is $\qquad$
a) 9
b) 8
c) 7
d) 6
38. If $x=0, y=-2, z=1$ the value of $2 x^{2} y^{3} z$ is $\qquad$
a) 1
b) 0
c) -2
d) 8
39. If $\mathrm{c}=35$ the value of $\frac{9}{5} C+32$ equals to $\qquad$
a) 85
b) 75
c) 95
d) 100
40. If $a=18, b=10$ and $c=5$, find the value of $a b c$ $\qquad$
a) 800
b) 700
c) 600
d) 900
