EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Polynomials

Grade : SSC Grade X

1. Find the quadratic equation with roots $((\frac{-7}{2}),(\frac{-7}{2}))$

(i) $(4x^2+24x+35)=0$ (ii) $(4x^2+28x+49)=0$ (iii) $(8x^2+42x+49)=0$ (iv) $(4x^2+32x+63)=0$

(v) $(2x^2+21x+49)=0$

2. Find the table of points that satisfy the parabola equation $y=(2x^2+15x+25)$

(i)

x	-2	-1	0	1	2
y	3	12	25	42	63

(ii)

x	-2	-1	0	1	4
y	3	12	25	42	65

(iii)

x	-2	-1	1	1	2
y	3	12	24	42	63

(iv)

x	-2	-1	-2	1	2
y	3	12	23	42	63

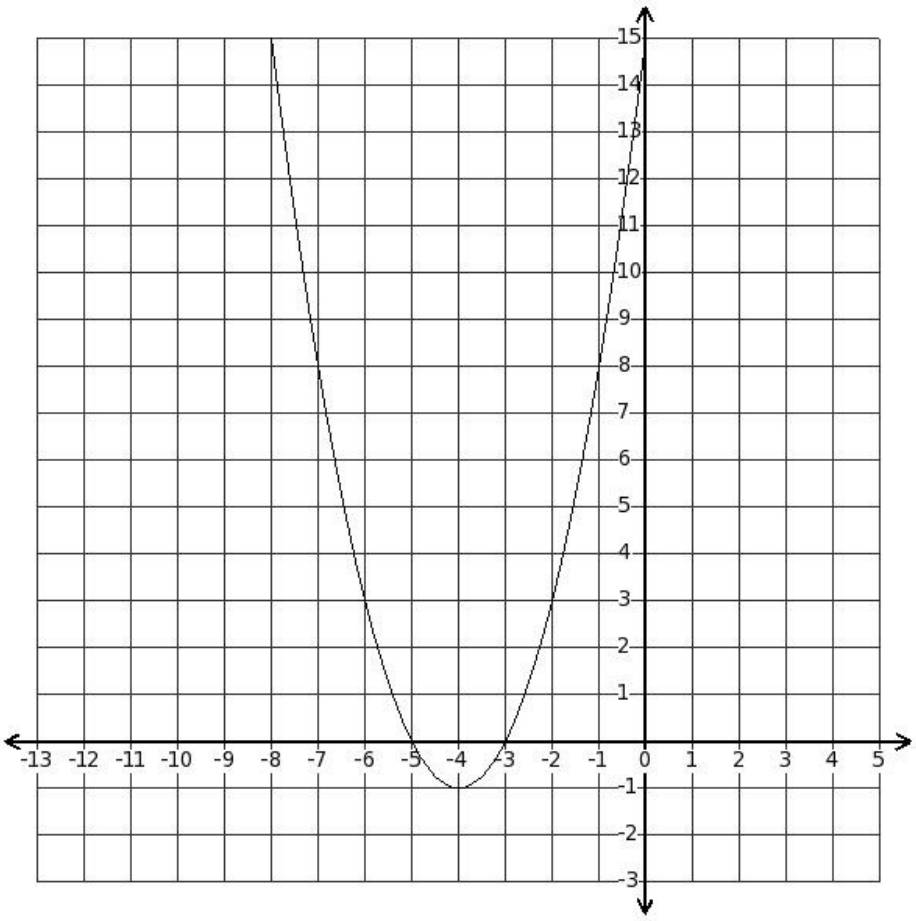
(v)

x	-2	-1	0	0	2
y	3	12	25	43	63

3. The sum of the roots of the quadratic equation $(-24x^2+6x+45)=0$ is

(i) $\frac{1}{6}$ (ii) $\frac{1}{2}$ (iii) $(\frac{-1}{4})$ (iv) $\frac{3}{4}$ (v) $\frac{1}{4}$

4. From the graph, find the approximate values of 'x' for which $y=8$



(i) 0.00,-8.00 (ii) -2.00,-6.00 (iii) -0.50,-7.50 (iv) -1.50,-6.50 (v) -1.00,-7.00

5. The value of the polynomial $(7q^4-3q^3+q^2+2q+6)$ at $q=(-4)$ is

(i) 1998 (ii) 1999 (iii) 1997 (iv) 2001 (v) 1996

6. Find the quadratic equation, the sum of whose roots is -6 and product is 9

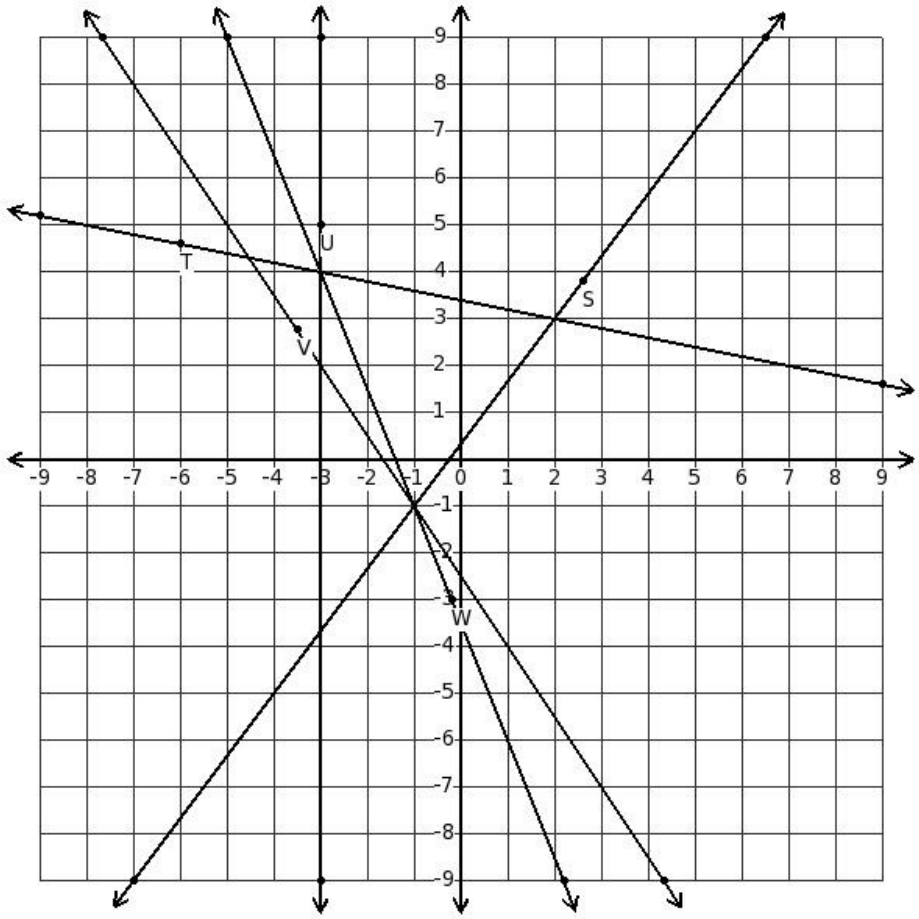
(i) $(9x^2+54x+81)=0$ (ii) $(9x^2+52x+81)=0$ (iii) $(9x^2+56x+81)=0$ (iv) $(10x^2+54x+81)=0$

(v) $(8x^2+54x+81)=0$

7. $(4x^4-16x^3-11x^2+9x)\div(4x^2-20x+9)$

(i) $(-x^2+x)$ (ii) x^2 (iii) (x^2-x) (iv) (x^2+2x) (v) (x^2+x)

8. Which of the displayed lines represent the equation $(4x-3y+1)=0$?



(i) line with point S (ii) line with point U (iii) line with point T (iv) line with point V (v) line with point W

9. Which of the following are not polynomials?

a) $49x^2$

b) $\sqrt{x}$

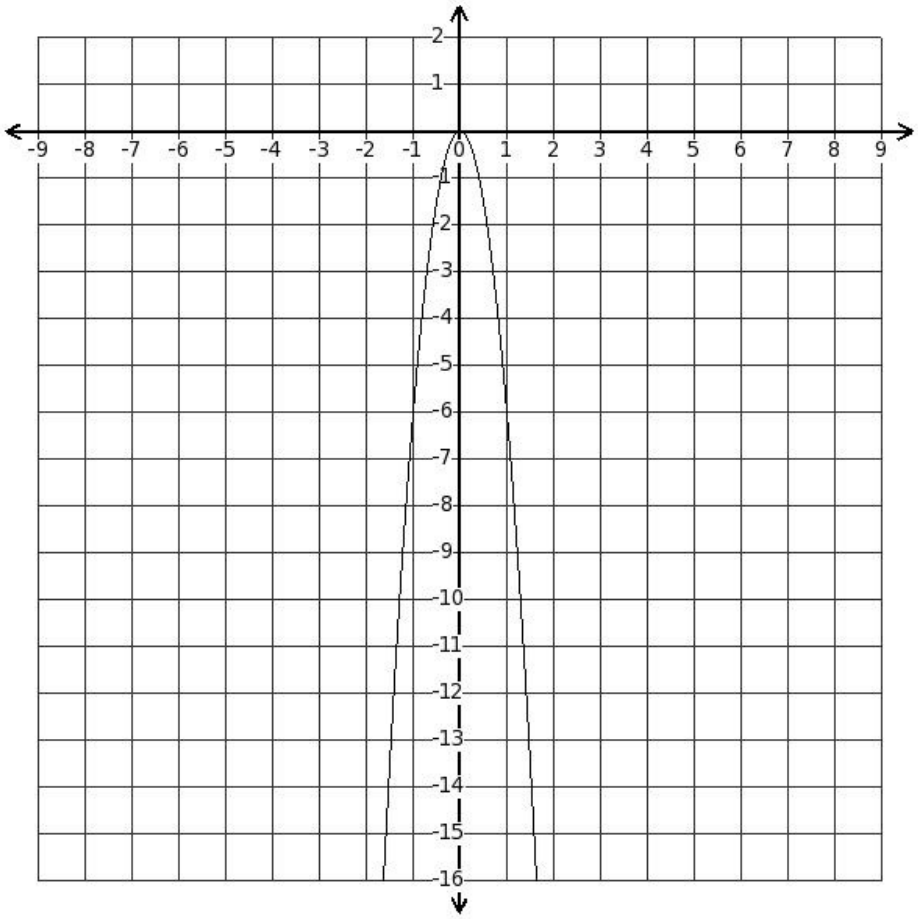
c) $(x-4y)$

d) $(5x^2-18xy-8y^2)$

e) $\frac{(5x+2y)}{(x-4y)}$

(i) {d,a,b} (ii) {c,e} (iii) {b,e} (iv) {c,e,b} (v) {a,b}

10. Find the table of points that satisfy the parabola equation $y=(-6x^2)$



(i)

x	-2	-1	0	1	4
y	-24	-6	0	-6	-22

(ii)

x	-2	-1	-2	1	2
y	-24	-6	-2	-6	-24

(iii)

x	-2	-1	0	1	2
y	-24	-6	0	-6	-24

(iv)

x	-2	-1	1	1	2
y	-24	-6	-1	-6	-24

(v)

x	-2	-1	0	0	2
y	-24	-6	0	-5	-24

11. The value of the polynomial $(-9a^2bc+1)$ at $a=(-1), b=1, c=(-5)$ is

(i) 47 (ii) 46 (iii) 44 (iv) 45 (v) 48

12. The remainder when $(9v^2-2v)$ is divided by $(v+5)$ is

(i) 237 (ii) 235 (iii) 236 (iv) 232 (v) 234

13. Which of the following are true for the parabola $y=ax^2+bx+c$?

a) If the curve does not meet the X-axis, there are no real roots for $y=ax^2+bx+c$

b) If the curve does not meet the X-axis , $b^2-4ac<0$

c) If the curve meets the X-axis at two places, there are two distinct non-real roots.

d) If the curve meets the X-axis at only one point , $b^2-4ac=0$

e) If the curve meets the X-axis at only one point , $b^2-4ac>0$

(i) {c,e,d} (ii) {c,a,b} (iii) {a,b,d} (iv) {c,a} (v) {e,b}

14. Find the quadratic equation whose roots are $(6+4\sqrt{7})$ and $(6-4\sqrt{7})$

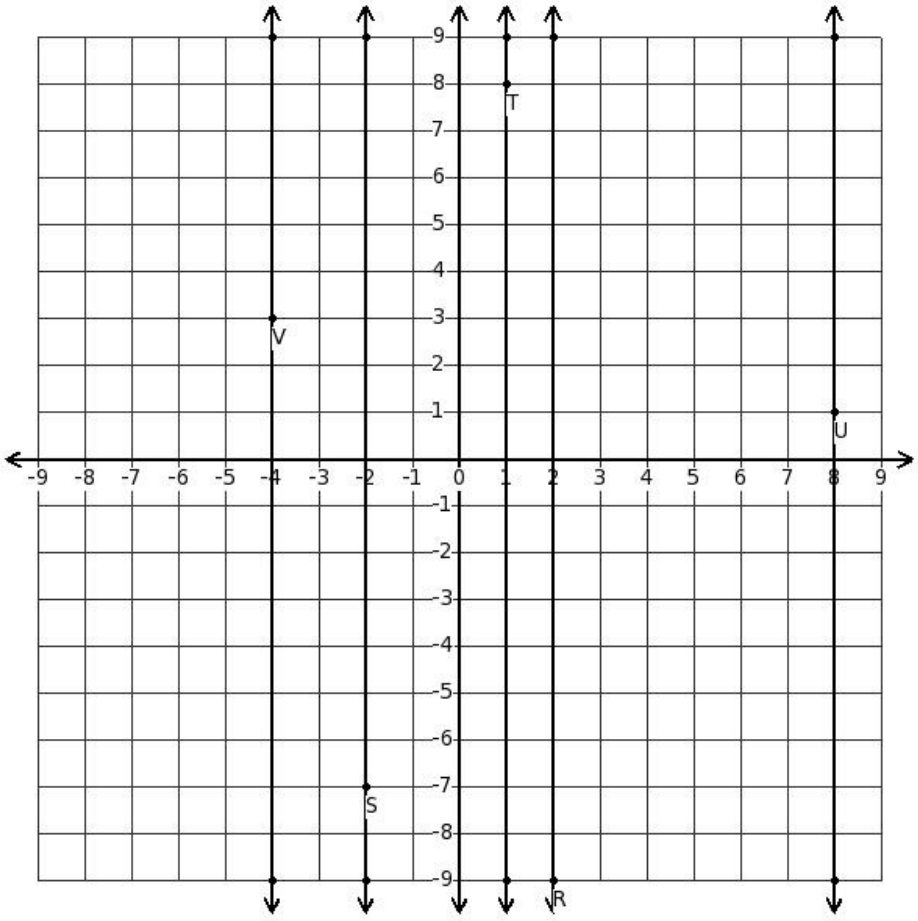
(i) $(x^2-12x-76)=0$ (ii) $(x^2-9x-76)=0$ (iii) $(2x^2-12x-76)=0$ (iv) $(-12x-76)=0$

(v) $(x^2-14x-76)=0$

15. The value of the polynomial $(-tu+4u)$ at $s=(-2), t=3, u=1$ is

(i) 3 (ii) -1 (iii) 1 (iv) 0 (v) 2

16. Which of the displayed lines represent the equation $x=2$

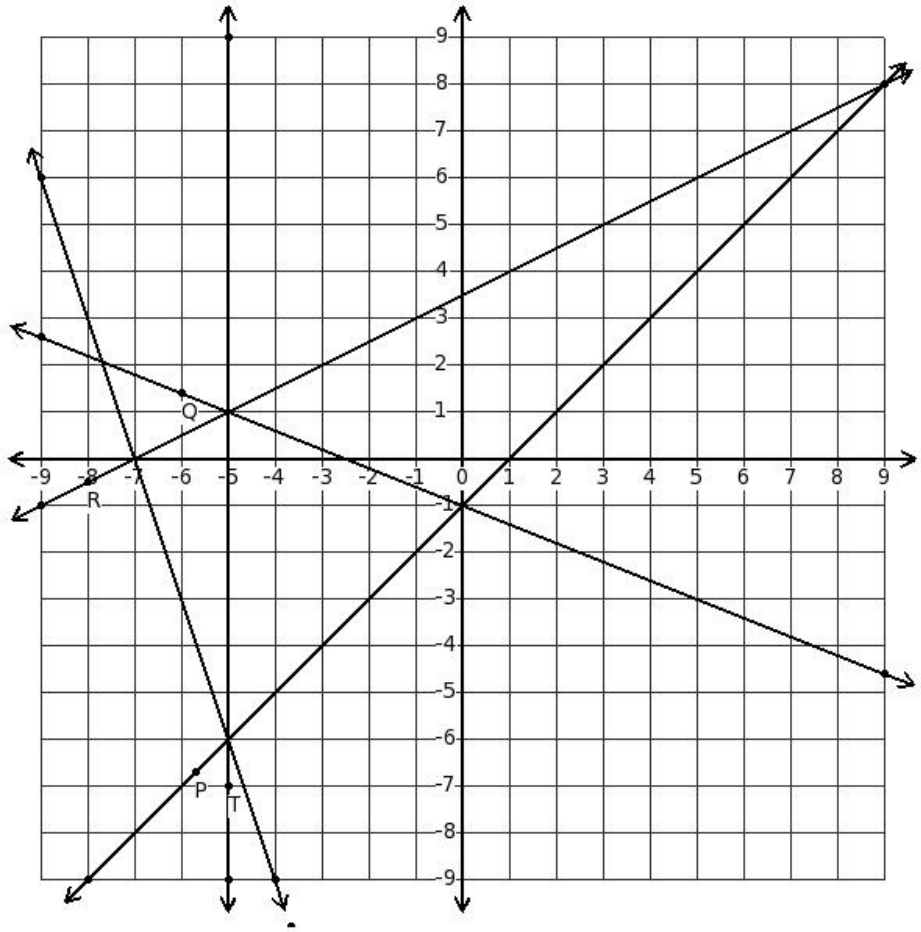


(i) line with point T (ii) line with point U (iii) line with point V (iv) line with point S (v) line with point R

17. The degree of polynomial $(-6i^2j^2k+4i^2j+5i^2k-4ij^2k^2+6ik)$ is

(i) 8 (ii) 3 (iii) 6 (iv) 5 (v) 4

18. Which of the displayed lines represent the equation $y=(x-1)$



(i) line with point P (ii) line with point T (iii) line with point S (iv) line with point Q (v) line with point R

19. If $(x-a)$ is a factor of $x^3 - ax^2 - 8x - 24$, find the value of a

(i) (-4) (ii) (-5) (iii) (-2) (iv) (-3) (v) (-1)

20. The quotient when $(-7k^2+4k)$ is divided by $(k+8)$ is

(i) $(-10k+60)$ (ii) $(-7k+60)$ (iii) $(-6k+60)$ (iv) $(-5k+60)$ (v) $(-8k+60)$

21. The remainder when $(-4p^2+7p+4)$ is divided by $(p-1)$ is

(i) 8 (ii) 6 (iii) 5 (iv) 9 (v) 7

22. The quotient when $(-b^2)$ is divided by $(b+5)$ is

(i) $(-2b+5)$ (ii) 5 (iii) $(-b+5)$ (iv) $(2b+5)$ (v) $(-4b+5)$

23. The given table of points satisfy which parabola equation?

x	-3	-2	-1	0	1	2	3
y	0	1	6	15	28	45	66

(i) $y=(x^2+11x+15)$ (ii) $y=(2x^2+11x+15)$ (iii) $y=(3x^2+11x+15)$ (iv) $y=(2x^2+14x+15)$

(v) $y=(2x^2+9x+15)$

24. Which of the following algebraic expressions is a cubic polynomial?

(i) $(-3p^3-3p^2-6p-6)$ (ii) $(4p^4+3p^3-5p^2+8p+6)$ (iii) $(-3p+6)$ (iv) $(-3p^2+7p+3)$ (v) 2

25. The value of the polynomial $7v$ at $u=(-1), v=1, w=5$ is

(i) 9 (ii) 5 (iii) 7 (iv) 8 (v) 6

Assignment Key

1) (ii)	2) (i)	3) (v)	4) (v)	5) (i)	6) (i)
7) (v)	8) (i)	9) (iii)	10) (iii)	11) (ii)	12) (ii)
13) (iii)	14) (i)	15) (iii)	16) (v)	17) (iv)	18) (i)
19) (iv)	20) (ii)	21) (v)	22) (iii)	23) (ii)	24) (i)
25) (iii)					