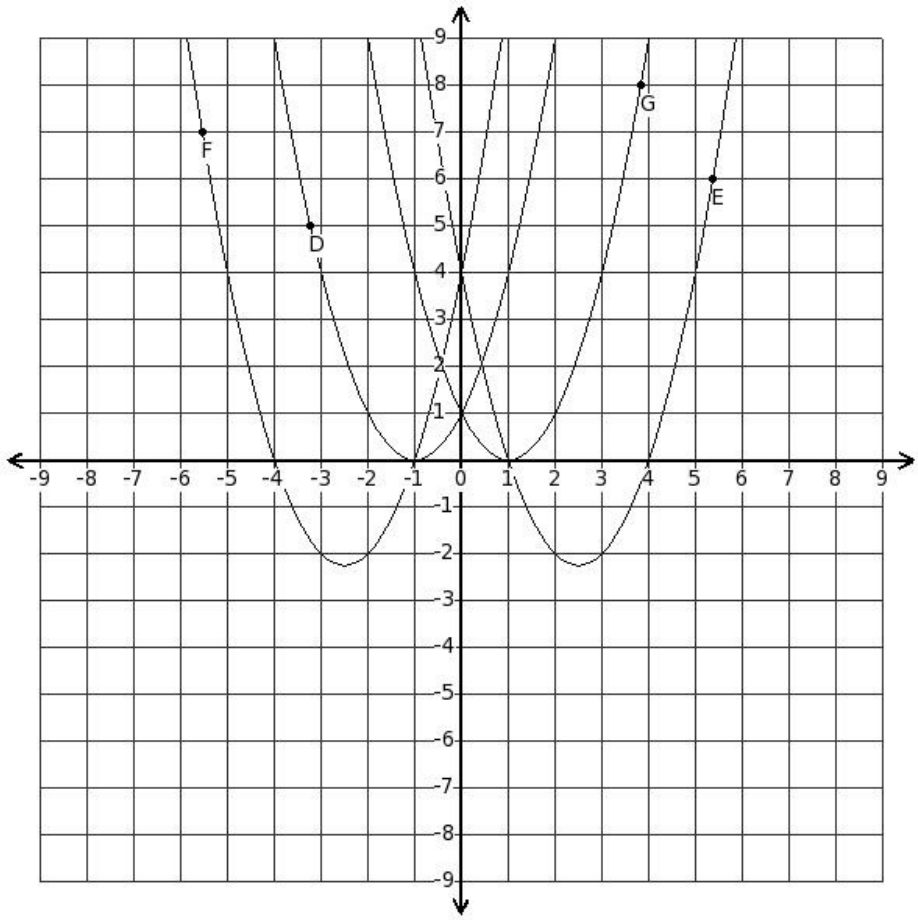
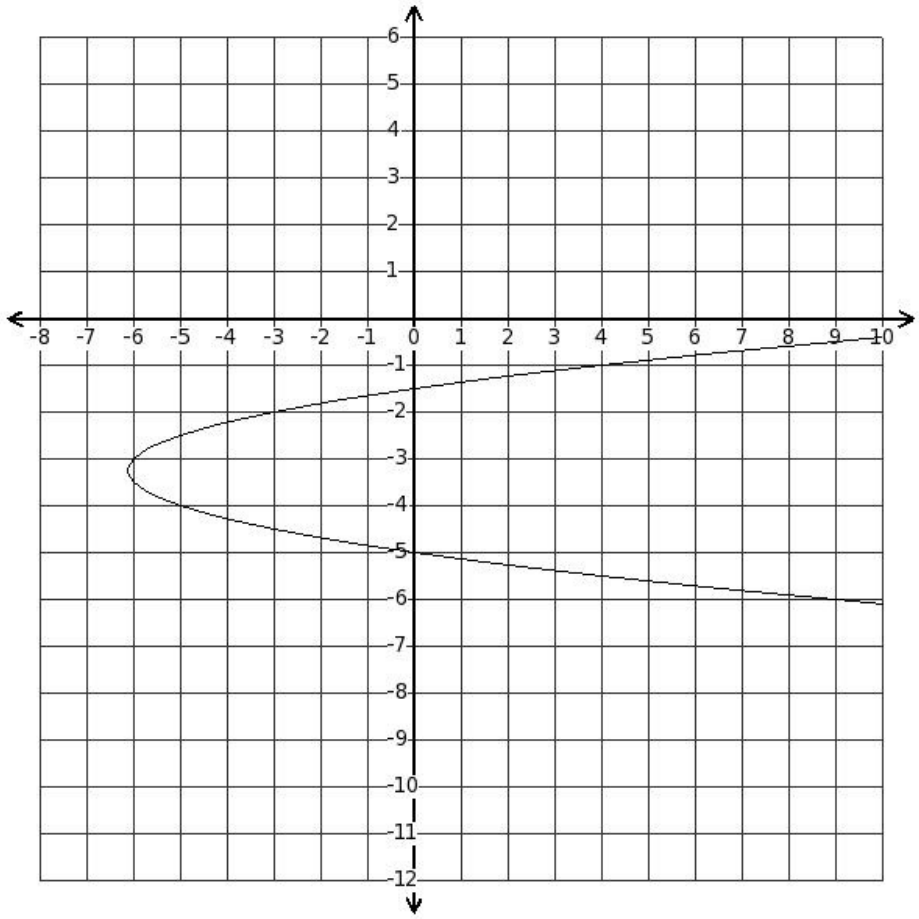
1. Which of the displayed parabolae represents the equation $y=(x^2-2x+1)$



(i) parabola with point G (ii) parabola with point F (iii) parabola with point E (iv) parabola with point D

2. Find the table of points that satisfy the parabola equation $x=(2y^2+13y+15)$



(i)

x	-3	4	15	29	49
y	-2	-1	0	2	2

(ii)

x	-3	4	15	30	51
y	-2	-1	0	1	4

(iii)

x	-3	4	13	30	49
y	-2	-1	-2	1	2

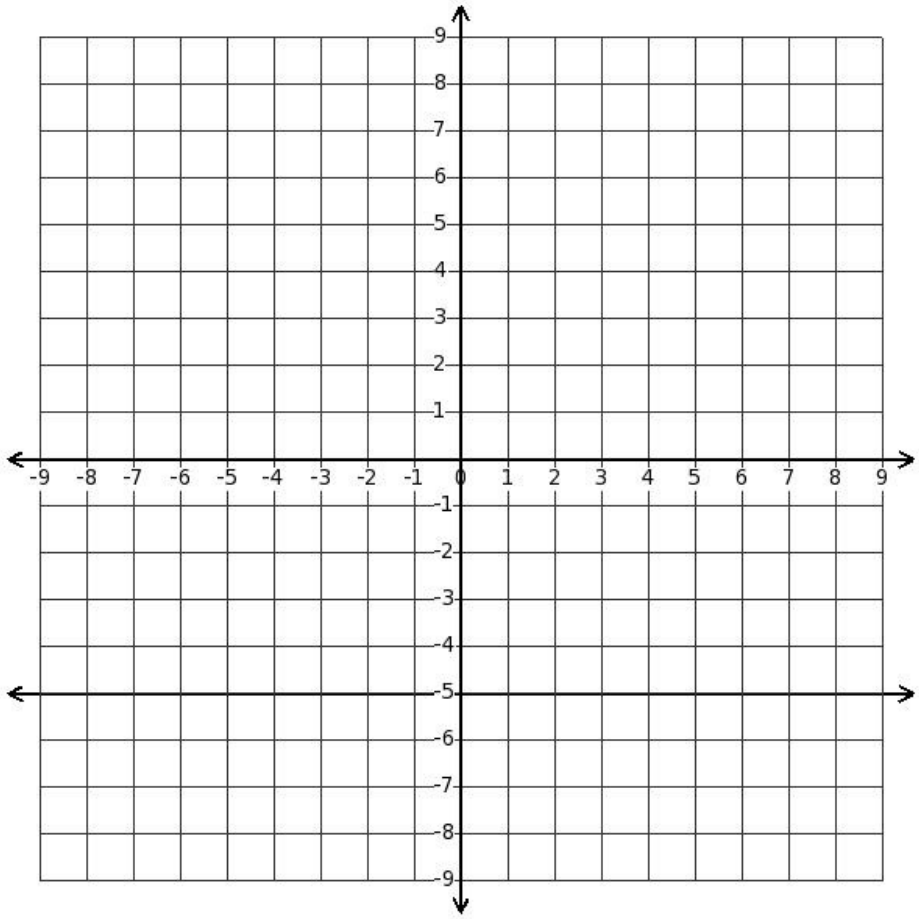
(iv)

x	-3	4	15	30	49
y	-2	-1	0	1	2

(v)

x	-3	4	16	30	49
y	-2	-1	-1	1	2

3. From the following graph of $y = p(x)$, find the number of zeroes of $p(x)$



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

4. Find the table of points that satisfy the parabola equation $y = x^2$

(i)

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

(ii)

x	-2	-1	0	1	2
y	4	1	0	1	4

(iii)

x	-2	-1	1	1	2
y	4	1	-1	1	4

(iv)

x	-2	-1	-2	1	2
y	4	1	-2	1	4

(v)

x	-2	-1	0	0	2
y	4	1	0	2	4

5. If p and q are the roots of $(x^2 + 2x - 8) = 0$, find the equation whose roots are $p + \frac{1}{q}$ and $q + \frac{1}{p}$

(i) $(4x^2 + 4x - 35) = 0$ (ii) $(8x^2 + 18x - 35) = 0$ (iii) $(16x^2 + 24x - 91) = 0$ (iv) $(8x^2 + 14x - 49) = 0$

(v) $(8x^2 + 6x - 35) = 0$

6. The value of the polynomial 0 at $p = (-3), q = (-4), r = 2$ is

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

7. The constant term in polynomial $(3e^3f^2g + 9e^2f^3g^3 + 9e^2fg^3 + 7ef^2g - 9f^3 + 7fg^3 + 3)$ is

(i) 3 (ii) 0 (iii) 2 (iv) 4 (v) 6

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

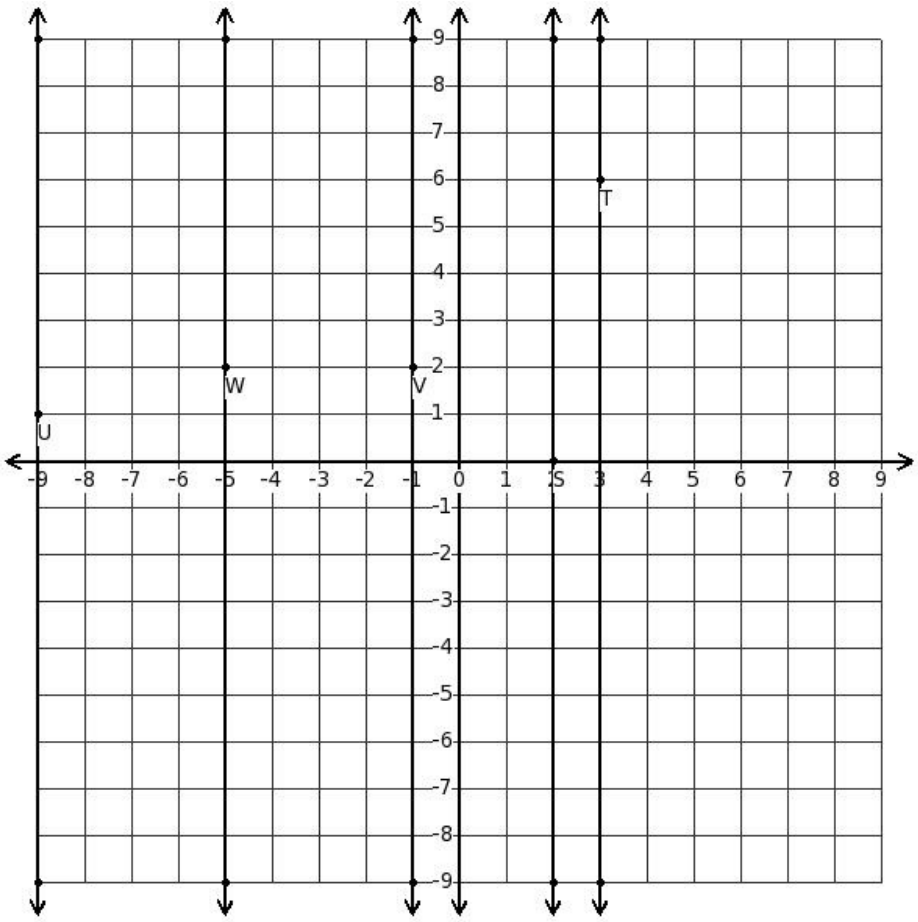
x	-3	-2	-1	0	1	2	3
y	-81	-36	-9	0	-9	-36	-81

(i) $y=(-8x^2)$ (ii) $y=(-10x^2)$ (iii) $y=(-6x^2)$ (iv) $y=(-9x^2)$ (v) $y=(-11x^2)$

9. The degree of polynomial $(-6b^3c^3d^3-b^3c^3+3bc^3d-3b-c^3-2cd-5d^3)$ is

(i) 8 (ii) 9 (iii) 12 (iv) 10 (v) 6

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



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

11. The quotient when $(2s^2-7s)$ is divided by $(s-5)$ is

(i) $(s+3)$ (ii) $(3s+3)$ (iii) 3 (iv) $(2s+3)$ (v) $(5s+3)$

12. The sum of the roots of the quadratic equation $(x^2-16x+64)=0$ is

(i) 15 (ii) 17 (iii) 14 (iv) 18 (v) 16

13. Given $f(p)=(6p^3+2p+4)$, find $f((-1))$

(i) -5 (ii) -4 (iii) -6 (iv) -1 (v) -3

14. Find the quadratic equation, the sum of whose roots is 14 and product is 49

(i) $(2x^2-14x+49)=0$ (ii) $(x^2-16x+49)=0$ (iii) $(x^2-14x+49)=0$ (iv) $(x^2-11x+49)=0$

(v) $(-14x+49)=0$

15. The value of the polynomial $(-4n-1)$ at $n=(-4)$ is

(i) 16 (ii) 17 (iii) 14 (iv) 15 (v) 13

16. The value of the polynomial $(5v^3-4v^2+5)$ at $v=3$ is

(i) 104 (ii) 102 (iii) 105 (iv) 107 (v) 103

17. The value of the polynomial $(-d^2e^2f^2+2def-4ef)$ at $d=(-3), e=(-4), f=3$ is

(i) -1174 (ii) -1175 (iii) -1177 (iv) -1179 (v) -1176

18. The coefficient of term s^3 in polynomial $(3s^3-3s^2+8s-6)$ is

(i) 3 (ii) 2 (iii) 4 (iv) 6 (v) 0

19. Find the quadratic equation with roots $(7,5)$

(i) $(x^2-12x+35)=0$ (ii) $(x^2-10x+25)=0$ (iii) $(x^2-13x+42)=0$ (iv) $(x^2-15x+56)=0$

(v) $(x^2-11x+30)=0$

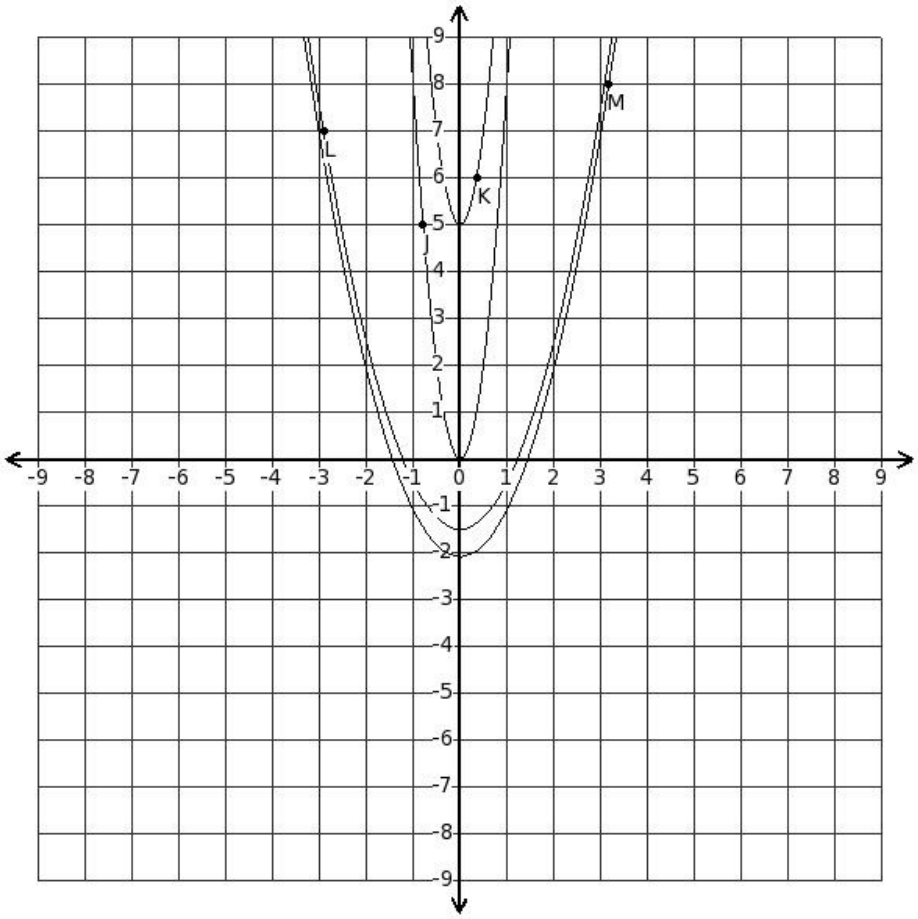
20. $(20x^3+5x^2)\div 5x$

(i) $(4x^2-x)$ (ii) $(3x^2+x)$ (iii) $(-4x^2+x)$ (iv) $(4x^2+x)$ (v) $(4x^2+2x)$

21. The remainder when $(-3j^2+7j)$ is divided by $(j+3)$ is

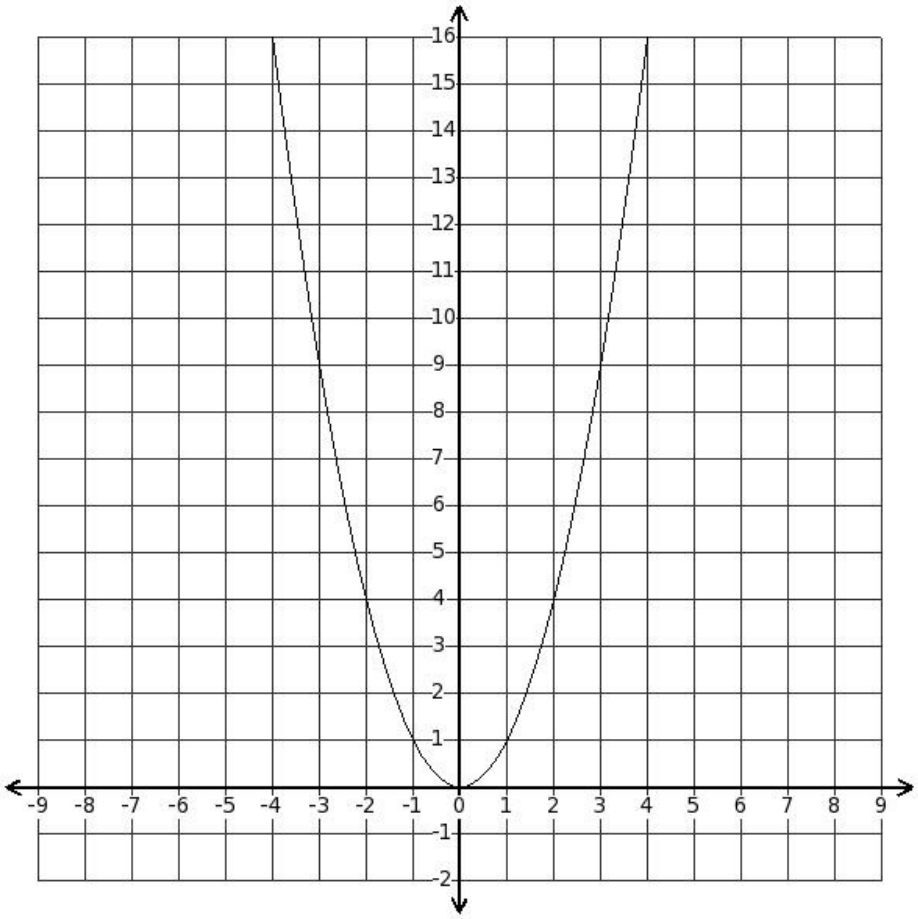
(i) (-47) (ii) (-51) (iii) (-49) (iv) (-46) (v) (-48)

22. Which of the displayed parabolae represents the equation $y = 8x^2$



(i) parabola with point J (ii) parabola with point L (iii) parabola with point M (iv) parabola with point K

23. Find the table of points that satisfy the parabola equation $y = x^2$



(i)

x	-2	-1	0	0	2
y	4	1	0	2	4

(ii)

x	-2	-1	0	1	2
y	4	1	0	1	4

(iii)

x	-2	-1	-2	1	2
y	4	1	-2	1	4

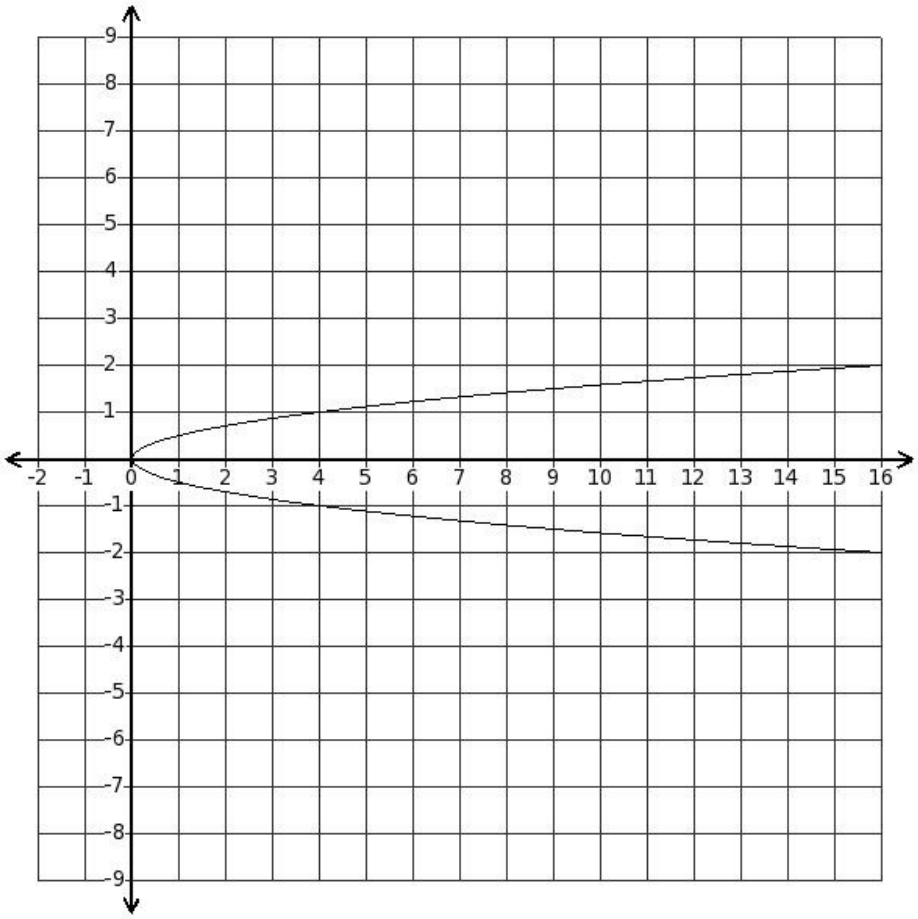
(iv)

x	-2	-1	1	1	2
y	4	1	-1	1	4

(v)

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

24. Find the table of points that satisfy the parabola equation $x = 4y^2$



(i)

x	16	4	0	4	16
y	-2	-1	0	1	2

(ii)

x	16	4	0	4	18
y	-2	-1	0	1	4

(iii)

x	16	4	1	4	16
y	-2	-1	-1	1	2

(iv)

x	16	4	0	3	16
y	-2	-1	0	2	2

(v)

x	16	4	-2	4	16
y	-2	-1	-2	1	2

25. Which of the following algebraic expressions is a constant polynomial?

(i) $(-9u^3+7u^2+2u-9)$ (ii) $(-3u^5+3u^4+5u^3-9u^2-5u)$ (iii) 7 (iv) $(8u^2-5u+7)$ (v) $(6u+8)$

Assignment Key

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