



ORAN-ORANTI YANIT ANAHTARI

> TEMEL KAVRAM – 1

- | | | | | |
|------------------|------------------|--------|------------------|--------|
| 1. 40 | 3. $\frac{3}{4}$ | 5. 6 | 7. $3\sqrt{2}$ | 9. 13 |
| 2. $\frac{1}{6}$ | 4. 20 | 6. -11 | 8. $\frac{5}{3}$ | 10. 25 |

> TEMEL KAVRAM – 2

- | | | | | |
|----------|------------------|-------------------|--------------------------|--------|
| 1. -25 | 3. 8 | 5. 18 | 7. $\frac{\sqrt{6}}{18}$ | 9. 1 |
| 2. -2017 | 4. $\frac{3}{c}$ | 6. $-\frac{2}{9}$ | 8. 2 | 10. 50 |

> TEMEL KAVRAM – 3

- | | | | | |
|------------------|------|-------|------------------|--------------------|
| 1. 24 | 3. 5 | 5. 11 | 7. $\frac{3}{2}$ | 9. 5 |
| 2. $\frac{1}{6}$ | 4. 6 | 6. 2b | 8. 4 | 10. $\frac{1}{18}$ |

> TEMEL KAVRAM – 4

- | | | | | |
|----------------|-------|--------|--------|---------|
| 1. 132° | 3. 28 | 5. 270 | 7. 13 | 9. 70 |
| 2. 13 | 4. 12 | 6. 240 | 8. 1,5 | 10. 400 |

> TEMEL KAVRAM – 5

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|-------|------|-------|------|--------|
| 1. 4 | 3. 5 | 5. 10 | 7. D | 9. 12 |
| 2. 15 | 4. 3 | 6. 7 | 8. 8 | 10. 10 |

> TEMEL KAVRAM – 6

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|-------|-------|-------|-------|--------|
| 1. 4 | 3. 90 | 5. 17 | 7. 14 | 9. 24 |
| 2. 88 | 4. 13 | 6. 35 | 8. 2 | 10. 41 |



ORAN-ORANTI YANIT ANAHTARI

► TEMEL KAVRAM – 7

1. $2\sqrt{3}$

3. 10

5. 8

7. 24

9. 18

2. $3\sqrt{2}$

4. 9

6. 63

8. 10

10. 2

► TEMEL KAVRAM – 8

1. $\sqrt{5}$

3. 16

5. 20

7. 1

2. 7

4. 70

6. 4

8. 12



DENKLEMLER ve PROBLEMLER YANIT ANAHTARI

TEMEL KAVRAM – 1

1. 4	9. 3	17. $\frac{11}{3}$	25. 5	33. 13
2. -36	10. $m \neq 4$	18. $-\frac{7}{3}$	26. 1	34. 10
3. -1	11. 6	19. -4	27. 30	35. 8
4. 3	12. $\frac{1}{2}$	20. -3	28. 2	36. -4
5. 1	13. $-\frac{26}{3}$	21. 8	29. -4	37. 42
6. -4	14. 8	22. 11	30. D	38. 9
7. 3	15. 1	23. 3	31. 25	39. 18
8. 2	16. -2	24. 2	32. 18	40. 10

TEMEL KAVRAM – 2

1. 3	8. 2200	15. 6	22. 4	29. 18
2. 35	9. $4B - 3A$	16. 2	23. 60	30. 80
3. 23	10. $3y - 2x$	17. 200	24. 5	31. 20
4. 22	11. 140	18. 70	25. $\frac{A+100}{50}$	32. 12
5. 16	12. 3	19. 18	26. 9	
6. 160	13. 12	20. 10	27. 420	
7. 37	14. 300	21. 32	28. 14	

TEMEL KAVRAM – 3

1. 155	8. 16	15. 18	22. 48	29. 9
2. $3D = 2A$	9. 25	16. 1200	23. 13	30. 72
3. 4	10. 1350	17. 3:2:4	24. 14	31. 55
4. 40	11. 80	18. 5	25. 93	32. 3
5. 210	12. 17	19. 54	26. 72	
6. 480	13. 90	20. 120	27. 14	
7. 48	14. 40	21. 650	28. 14	



DENKLEMLER ve PROBLEMLER YANIT ANAHTARI

TEMEL KAVRAM – 4

1. a) 10 b) 14 c) 14	10. 6	19. 125	28. 45.	37. E
2. 19	11. 288	20. 360	29. a) 60 b) 41	38. 25
3. 50	12. 384	21. 45	30. 37	39. 74
4. 33	13. 50	22. 29	31. 45	40. 45
5. 700	14. 55	23. $\frac{16}{5}$	32. 5	41. 4
6. 7	15. 30	24. 5:9	33. 30	42. 6
7. 32	16. 32	25. $\frac{8}{3}$	34. 2	43. 40
8. 8	17. a) 15 b) 35 c) 64 d) 38	26. 45 ^l	35. 14	
9. 8 cm sola	18. 25	27. 30	36. 2	

TEMEL KAVRAM – 5

1. 143	6. 160	11. 14	16. A, B, D	21. 18
2. 25	7. 54	12. 200	17. 27	
3. 200	8. 8	13. 175	18. 2 ya da 4	
4. 102	9. 15	14. 25	19. 11	
5. 160	10. 64	15. 40	20. 6	

TEMEL KAVRAM – 6

1. 15	8. 17	15. 3y-3x	22. 40	29. 25
2. 2x+22	9. 7	16. 27	23. 66	30. 64
3. 2	10. B	17. 60	24. 36	31. 5
4. 8	11. 13	18. 48	25. 9	32. 18
5. 2022	12. M.Ö 70	19. 4	26. 32	33. 60
6. 20	13. 6	20. 10	27. 20	34. 26
7. 6	14. 1979	21. 20	28. 23	



DENKLEMLER ve PROBLEMLER YANIT ANAHTARI

> TEMEL KAVRAM – 7

1. 6	11. 10	21. 120	31. 3	41. 42
2. 9	12. 14	22. E	32. 2	42. 5
3. 7	13. 6	23. 4	33. 6	43. 4
4. 5	14. $\frac{39}{7}$	24. 4	34. 15	44. 180
5. 7,5	15. 4	25. $\frac{3}{16}$	35. 40	45. 100
6. 32	16. 5	26. 4	36. 30	46. 5
7. 12	17. 12	27. 10	37. 10	47. 18
8. 6	18. 16	28. 24	38. 6	48. 18
9. 3	19. 8	29. 3	39. 40^{II}	
10. 4	20. 6	30. 30	40. $\frac{3}{13}$	

> TEMEL KAVRAM – 8

1. 600	8. 500	15. 15	22. 4	29. 18,6
2. %64	9. %20	16. 30	23. $\frac{3}{4}$	30. 30
3. 12	10. 60	17. 1600	24. 80	31. 42
4. 50	11. 46	18. 80	25. 20	
5. $\frac{100}{3}$	12. 43	19. 125	26. $y+z=4x$	
6. 150	13. 16	20. 7,5	27. 30	
7. 60	14. 55	21. 5	28. 25	



DENKLEMLER ve PROBLEMLER YANIT ANAHTARI

> TEMEL KAVRAM – 8

1. %25	18. 120	35. $\frac{2}{3}$	52. $\frac{6}{5}$	69. 375
2. %25	19. $\frac{68a}{3}$	36. %50	53. %10 artar.	70. 20
3. %50	20. 80	37. 60	54. %40	71. 27,5
4. 64	21. %20	38. 36	55. 30	72. 15
5. %50	22. $\frac{5}{7}$	39. 20	56. 2,4	73. 205
6. 81	23. %55	40. %16	57. 36	74. %22
7. 90	24. %50	41. 5	58. 240	75. $\frac{7}{10}$
8. 500	25. 55	42. 640	59. %12	76. 7
9. 40	26. 6	43. 800	60. 24	77. 20
10. 40	27. 15	44. %14	61. 10	78. 60
11. 7	28. 75	45. %60	62. 180	79. 40
12. $\frac{k+z}{2}$	29. %4 artar.	46. 1,09x	63. 3	80. 15
13. 2	30. 75	47. 65	64. $\frac{12}{5}$	81. 100
14. %400	31. 300	48. %20	65. 10	82. 45
15. %25	32. 35	49. %35	66. 70	83. 230
16. 50	33. 75	50. %10 artar.	67. 110	84. $\frac{40}{11}$
17. 1,4	34. 160	51. %20	68. 160	



DENKLEMLER ve PROBLEMLER YANIT ANAHTARI

► TEMEL KAVRAM – 9

1. 60	11. 40	21. 32	31. 150	41. 8
2. %60	12. 50	22. 36	32. 40	42. 25
3. 80	13. 50	23. 30	33. 17	43. 90
4. 540	14. 20	24. 60	34. 225	44. 10
5. 40	15. 30	25. 64	35. 50	
6. 25	16. 16	26. 50	36. 90	
7. 50	17. 20	27. 64	37. $\frac{320}{11}$	
8. 4	18. 50	28. 32	38. 65	
9. 178	19. 25	29. 20	39. 19	
10. 7	20. 4	30. 40	40. 450	

► TEMEL KAVRAM – 10

1. 80	12. 80	23. 400	34. 120	45. 12'
2. 20	13. 40	24. 45'	35. 12	46. 60
3. 600	14. 45	25. 45''	36. 120	47. 220
4. $\frac{ab}{a-1}$	15. 16	26. 5	37. 35	48. 10
5. 180	16. 10	27. 10	38. 100	49. 70
6. 240	17. 120	28. 20	39. 135'	50. 12'
7. 4	18. 2	29. 2,1	40. 48	51. 45
8. 10	19. 75	30. 450	41. 56	52. 80
9. 2	20. 45	31. 300	42. 69	53. 8
10. 8	21. $\frac{1}{2}$	32. 4	43. 5	54. 60
11. $\frac{2v}{3}$	22. 80	33. 6	44. 120	55. $\frac{5}{2}$



MANTIK YANIT ANAHTARI

TEMEL KAVRAM – 1

1. a ve c
2. b ve c
3. a) 0 b) 1 c) 0
4. a ve d, b ve c
5. $u = v, y = z$
6. a) $h = 1$ b) $k = 0$ c) $l = 1$ d) $m = 1$
7. a) 0 b) 1 c) 0
8. 1
9. a) 18 b) 23
13. p
14. $p \wedge q'$
15. $p = 0, q = 0, r' = 1$
16. 1
17. q'
18. 1
19. 0
20. 1
21. 1
22. 1
23. 0
25. 1
26. 1
27. a) 1 b) 0 c) 1
28. 1, 0, 1, 0
29. a) 1 b) 0 c) 1 d) 1
30. a) 1 b) 0 c) 1 d) 1
31. a) $q' \Rightarrow p, p' \Rightarrow q, q \Rightarrow p$
b) $q \Rightarrow p', p \Rightarrow q', q' \Rightarrow p$
c) $q' \Rightarrow p', p \Rightarrow q, q \Rightarrow p$
33. a) $p' \vee q'$ b) $p \Rightarrow q' \equiv p' \vee q'$
c) $p' \vee q' \equiv p \Rightarrow q'$ d) $p' \vee q \equiv p \Rightarrow q$
34. a) 1 b) p c) 0 d) 1
35. a) $p = 1, q = 1$ b) $p = 1, q = 0$
 $p = 0, q = 0$
36. a) $p = 1, q = 0$
b) $p = ?, q = ?$
c) $p = 1, q = 0$
38. $(x^2 = 9) \Rightarrow (x = -3)$
 $(x \neq -3) \Rightarrow (x^2 = 9)$
 $(x^2 \neq 9) \Rightarrow (x \neq -3)$
39. $p \Rightarrow q$
40. 1
41. $q = 0, p = 1, r = 1$
42. 1
46. 1
47. a) 1 b) 0
48. a) p b) 1
49. $p \Leftrightarrow q, r \Leftrightarrow s, (r \Rightarrow s) \wedge (s \Rightarrow r)$
50. a) 0 b) 0 c) 1
51. $(s \wedge d) \Rightarrow a$
54. a) 0 b) 0
55. Çelişki
56. $p = 0, q = 0, r' = 1$
57. 0
58. 1
59. Çelişki
60. a) T b) T c) T
61. $p = 0, q = 0, r = 1$
62. 1
63. Totoloji
64. Çelişki
65. $p = 0, q = 1, r = 1, s = 0$
66. 1
67. $e \rightarrow$ Totoloji
69. $(p \Rightarrow q) \vee r$
70. 1
71. a) 1 b) 1 c) 1 d) 1 e) 0
72. $(p' \Rightarrow q)' \Rightarrow [(p \vee q) \Rightarrow r]'$
74. $(A \cap B)' \cup (A \cap B)'$
75. 0



KÜMELER ve KARTEZYEN ÇARPIM YANIT ANAHTARI

► TEMEL KAVRAM – 1

1. Yalnız I 2. 23

► TEMEL KAVRAM – 2

1. 17 3. IV 5. 31 7. 8
2. III ve IV 4. 5 6. 6

► TEMEL KAVRAM – 3

1. 48 3. 24 5. 56 7. 160 9. 24
2. 8 4. 96 6. 3 8. 15

► TEMEL KAVRAM – 4

1. 4 3. 14 5. 48 7. 8
2. 15 4. 112 6. 8 8. 12

► TEMEL KAVRAM – 5

1. $\left(\frac{1}{2}, \frac{2}{3}\right)$ 3. 15 5. 7 7. 19
2. 9 4. 95 6. 19 8. 53

► TEMEL KAVRAM – 6

1. 9 3. 10 5. 7 7. 4 9. 12
2. 5 4. 11 6. 6 8. 16



KÜMELER ve KARTEZYEN ÇARPIM YANIT ANAHTARI

> TEMEL KAVRAM – 7

- | | | | |
|------|----------|-------|-------|
| 1. E | 3. B^I | 5. 10 | 7. 39 |
| 2. E | 4. 3 | 6. 11 | 8. 13 |

> TEMEL KAVRAM – 8

- | | | | |
|-------|-------|-------|-------|
| 1. 6 | 3. 6 | 5. 24 | 7. 27 |
| 2. 12 | 4. 16 | 6. 11 | |

> TEMEL KAVRAM – 9

- | | | | |
|-------|------------------------------------|--------|-------|
| 1. 19 | 3. $\{(0,1), (1,2), (2,2)\}$ | 5. 192 | 7. 42 |
| 2. 23 | 4. $\{(1,x), (1,y), (2,x) (2,y)\}$ | 6. 8 | |

> TEMEL KAVRAM – 10

- | | |
|--|-------------------------------|
| 1. $\{0,5\}$ | 3. $A=[-2, 5)$
$B=[-2, 4)$ |
| 2. $A=\{-3, -1, 2, 5\}$
$B=(-1, 4]$ | |

> TEMEL KAVRAM – 11

- | | | |
|-------|------------|----------------|
| 1. 24 | 3. 5 | 5. $5\sqrt{2}$ |
| 2. 35 | 4. 16π | 6. 4 |

> TEMEL KAVRAM – 12

- | | | | | |
|-------|-------|------|-------|------|
| 1. 15 | 3. 18 | 5. 2 | 7. 12 | 9. 7 |
| 2. 9 | 4. 21 | 6. 2 | 8. 14 | |



KÜMELER ve KARTEZYEN ÇARPIM YANIT ANAHTARI

► TEMEL KAVRAM – 13

- | | | | |
|-------|-------|-------|-------|
| 1. 18 | 3. 66 | 5. 5 | 7. 6 |
| 2. 7 | 4. 20 | 6. 11 | 8. 12 |

► TEMEL KAVRAM – 14

- | | |
|------|------|
| 1. C | 3. E |
| 2. A | 4. D |

► TEMEL KAVRAM – 15

- | | | | |
|-------|-------|-------|-------|
| 1. 20 | 3. 12 | 5. 23 | 7. 10 |
| 2. 16 | 4. 8 | 6. 17 | |

► TEMEL KAVRAM – 16

- | | | | |
|--------|--------|---------|---------|
| 1. 8 | 3. 8 | 5. 40 | 7. 15 |
| 2. 480 | 4. 200 | 6. % 40 | 8. % 40 |

► TEMEL KAVRAM – 17

- | | | | |
|-------|-------|-------|-------|
| 1. 34 | 3. 6 | 5. 10 | 7. 42 |
| 2. 7 | 4. 14 | 6. 18 | |

► TEMEL KAVRAM – 18

- | | | | |
|------|-------|-------|-------|
| 1. 5 | 3. 18 | 5. 17 | 7. 11 |
| 2. 6 | 4. 23 | 6. 3 | 8. 7 |



FONKSİYONLAR YANIT ANAHTARI

TEMEL KAVRAM – 1

1. Yalnız I
2. T.K= \mathbb{R}
G.K= $(-\infty, 5]$
3. T.K= $[-2, 5]$
G.K= $[-1, 4]$
4. T.K= $(-3, 7] \setminus \{3\}$
G.K= $(-2, 4]$

TEMEL KAVRAM – 3

1. \mathbb{R}
2. $\mathbb{R} - \{-1, 0, 1\}$
3. $[-5, 5]$
4. $[-5, -1]$
5. $\mathbb{R} - \{-3, 3\}$
6. 9
7. 10
8. a) $[-1, 2]$ b) $[-3, 3]$

TEMEL KAVRAM – 4

1. -12
2. 8
3. 4
4. 4
5. $[-4, \infty)$
6. $[3, 7)$
7. $(2, \infty)$
8. $[-3, \infty)$
9. \emptyset

TEMEL KAVRAM – 5

1. 8
2. I ve III
3. I ve II
4. 10
5. 12
6. 360
7. 24

TEMEL KAVRAM – 6

1. Yalnız I
2. 21
3. 11
4. 4
5. 8
6. 7
7. 19
8. $[5, \infty)$

TEMEL KAVRAM – 7

1. 100
2. 12
3. 12
4. 120
5. -1
6. $\frac{5}{4}$
7. 7 veya 8
8. 0

TEMEL KAVRAM – 8

1. 4
2. 5
3. 18
4. 5
5. 14
6. 4
7. 3 ya da 4
8. Yalnız III
9. Yalnız I



FONKSİYONLAR YANIT ANAHTARI

► TEMEL KAVRAM – 9

- | | | | | |
|-------|-------|------|-------------|--------|
| 1. 42 | 3. 17 | 5. 0 | 7. Yanlız I | 9. 150 |
| 2. 5 | 4. 3 | 6. 7 | 8. 4 | |

► TEMEL KAVRAM – 10

- | | | | | |
|-------|-------|------|--------|---------------|
| 1. 4 | 3. -8 | 5. 3 | 7. -14 | 9. 8 |
| 2. 11 | 4. 38 | 6. 8 | 8. 6 | 10. Yanlız IV |

► TEMEL KAVRAM – 11

- | | | | |
|--------------------|----------------------|------|------|
| 1. $\frac{x+3}{2}$ | 3. $\frac{4x}{2x-3}$ | 5. 5 | 7. 7 |
| 2. $3x-5$ | 4. 2 | 6. 3 | |

► TEMEL KAVRAM – 12

- | | | | | |
|--------------------|-------------------|------|------|------|
| 1. $\sqrt[3]{x+2}$ | 3. $3+\sqrt{x-1}$ | 5. 4 | 7. 1 | 9. 3 |
| 2. x^2+2 | 4. $1-\sqrt{x-3}$ | 6. 8 | 8. 3 | |

► TEMEL KAVRAM – 13

- | | | | |
|------|-------------|-------|-------|
| 1. 4 | 3. -5 | 5. 32 | 7. 65 |
| 2. 9 | 4. I ve III | 6. 6! | 8. 12 |

► TEMEL KAVRAM – 14

- | | | |
|-------|--------|-------|
| 1. 15 | 3. 3 | 5. 8 |
| 2. 32 | 4. 216 | 6. 12 |

► TEMEL KAVRAM – 15

- | | | | |
|------|-----------|-------|-------|
| 1. 9 | 3. $4x+5$ | 5. -9 | 7. 15 |
| 2. 4 | 4. -3 | 6. 1 | |



FONKSİYONLAR YANIT ANAHTARI

TEMEL KAVRAM – 16

- | | | | |
|------|------|--------------------|---------------------|
| 1. 3 | 3. 3 | 5. 4 | 7. $\frac{x+2}{3x}$ |
| 2. 8 | 4. 5 | 6. $\frac{x}{x+3}$ | 8. 4 |

TEMEL KAVRAM – 17

- | | | | |
|-------|-------|-------|-------|
| 1. 5 | 3. 2 | 5. 4 | 7. 22 |
| 2. 20 | 4. 10 | 6. 19 | 8. 12 |

TEMEL KAVRAM – 18

- | | | | | |
|------------------|------|---|-------|--------|
| 1. $\frac{3}{2}$ | 3. 6 | 5. $\begin{cases} 2x+4, & x \geq 1 \\ 7-x, & x < 1 \end{cases}$ | 7. 97 | 9. -10 |
| 2. 5 | 4. 2 | 6. 13 | 8. 55 | |

TEMEL KAVRAM – 19

- | | | | |
|-------------|------------------|------|-------------------|
| 1. 2, -2, 6 | 4. 3 | 7. 3 | 10. 2 |
| 2. 6, 2, 4 | 5. $\frac{3}{4}$ | 8. 2 | 11. 19 |
| 3. 2, 8 | 6. 2 | 9. 3 | 12. $(1, \infty)$ |

TEMEL KAVRAM – 20

Kova Grafik / Z Grafik

- | | | | |
|----------------------------------|---------------------------------|------------------------------|------|
| 1. a) $[3, \infty)$ b) $[-1, 2]$ | 3. a) 0 b) 9 c) -2 | 5. a) 4 b) 2 c) 7 d) 11 e) 8 | 7. 6 |
| 2. a) $[-4, 4]$ b) 9 | 4. a) 0 b) $(-\infty, -4]$ c) 1 | 6. 36 | |

TEMEL KAVRAM – 20

Grafik Uygulamaları

- | | |
|-------|----------------|
| 6. 8 | 8. 128 |
| 7. 32 | 9. $8\pi - 16$ |



POLİNOMLAR YANIT ANAHTARI

> TEMEL KAVRAM – 1

- | | | | |
|-------|------|-------|-------|
| 1. 20 | 3. 2 | 5. 7 | 7. 14 |
| 2. 20 | 4. 3 | 6. 19 | |

> TEMEL KAVRAM – 2

- | | | | |
|-------|-------|-------|-------|
| 1. 7 | 3. 10 | 5. 56 | 7. 2 |
| 2. 64 | 4. 7 | 6. -3 | 8. 11 |

> TEMEL KAVRAM – 3

- | | | | |
|-------|-------|-------|-------|
| 1. 14 | 3. 11 | 5. 12 | 7. 12 |
| 2. 24 | 4. 31 | 6. 33 | 8. 10 |

> TEMEL KAVRAM – 4

- | | | | |
|-------|-------------------|------|-------------------|
| 1. 5 | 3. 5 | 5. 8 | 7. 7 |
| 2. -7 | 4. $-\frac{3}{4}$ | 6. 8 | 8. $-\frac{3}{2}$ |

> TEMEL KAVRAM – 5

- | | | | |
|------|-------|------|--------------|
| 1. 1 | 3. 10 | 5. 5 | 7. 24 |
| 2. 9 | 4. -1 | 6. 7 | 8. Yalnız II |

> TEMEL KAVRAM – 6

- | | | | |
|------|-------|-------|------|
| 1. 5 | 3. 2 | 5. -4 | 7. 3 |
| 2. | 4. 14 | 6. 16 | 8. 8 |



POLİNOMLAR YANIT ANAHTARI

> TEMEL KAVRAM – 7

- | | | | |
|-------|------|-------|-------|
| 1. 3 | 3. 3 | 5. -1 | 7. 25 |
| 2. -3 | 4. 4 | 6. 10 | 8. 4 |

> TEMEL KAVRAM – 8

- | | | | |
|------|-------|-------|-------|
| 1. 4 | 3. -7 | 5. 26 | 7. 16 |
| 2. 6 | 4. -5 | 6. 7 | 8. 14 |

> TEMEL KAVRAM – 9

- | | | | |
|------|-------|----------|-----------|
| 1. 5 | 3. 18 | 5. $x-1$ | 7. 4 |
| 2. 2 | 4. 35 | 6. 0 | 8. $7x+8$ |

> TEMEL KAVRAM – 10

- | | | |
|-----------|----------------|----------|
| 1. $x-5$ | 3. $3x^2-2x+4$ | 5. $x+3$ |
| 2. $2x+5$ | 4. $2x^2+3x-1$ | |

> TEMEL KAVRAM – 11

- | | | | |
|-------|-----------|------------|-----------|
| 1. 16 | 3. $5x+4$ | 5. $6x+37$ | 7. $2x-5$ |
| 2. 2 | 4. $x+2$ | 6. -21 | |

> TEMEL KAVRAM – 12

- | | | | |
|-------|-------|------------------|-------|
| 1. 19 | 3. 18 | 5. 52 | 7. -8 |
| 2. 9 | 4. 4 | 6. $\frac{8}{3}$ | |



II. DERECEDEN DENKLEMLER YANIT ANAHTARI

TEMEL KAVRAM – 1

- | | | | |
|----------------|------------------|------------------|------|
| 1. 8 | 3. $\frac{3}{2}$ | 5. \emptyset | 7. 4 |
| 2. $\{5, -2\}$ | 4. $\{3\}$ | 6. $\frac{5}{6}$ | |

TEMEL KAVRAM – 2

- | | | | |
|------|--------------|----------------|------|
| 1. 2 | 2. $(-2, 2)$ | 3. $2 < a < 3$ | 4. E |
|------|--------------|----------------|------|

TEMEL KAVRAM – 3

- | | | | |
|-------|------|--|---------------|
| 1. 16 | 3. 7 | 5. 5 | 7. $\sqrt{3}$ |
| 2. 9 | 4. 9 | 6. a) $\left\{\frac{\sqrt{5}}{2}, 1\right\}$ | 8. 49 |
| | | b) $\left\{-\frac{1}{m}, n\right\}$ | |

TEMEL KAVRAM – 4

- | | | |
|-------|-------|--------|
| 1. 4 | 3. -2 | 5. 0 |
| 2. 12 | 4. 3 | 6. 198 |

TEMEL KAVRAM – 5

- | | | | |
|-----------------------|------|----------------|------|
| 1. 4, 1, 4, 4, 14, 52 | 3. 4 | 5. 17 | 7. 4 |
| 2. 4 | 4. 3 | 6. $2\sqrt{2}$ | 8. 2 |

TEMEL KAVRAM – 6

- | | | | | |
|-------|---------------------------|---------------|-------|-------|
| 1. -7 | 3. $-\frac{2\sqrt{2}}{3}$ | 5. 10 | 7. -4 | 9. 41 |
| 2. 10 | 4. 26 | 6. $\sqrt{7}$ | 8. 5 | 10. 4 |



II. DERECEDEN DENKLEMLER YANIT ANAHTARI

▶ TEMEL KAVRAM – 7

- | | | | |
|----------------|-----------------|------|-------|
| 1. -3 | 3. 9 | 5. 1 | 7. 30 |
| 2. $\sqrt{10}$ | 4. $3\sqrt{14}$ | 6. 1 | 8. -1 |

▶ TEMEL KAVRAM – 8

- | | | | |
|-------|-------|------|-------|
| 1. 0 | 3. -2 | 5. 3 | 7. 8 |
| 2. -1 | 4. -4 | 6. 8 | 8. -4 |

▶ TEMEL KAVRAM – 9

- | | | | |
|---------------------|---------------|-------|------|
| 1. $\frac{192}{25}$ | 3. 2 ya da -2 | 5. 4 | 7. 5 |
| 2. -2 | 4. -10 | 6. -3 | |

▶ TEMEL KAVRAM – 10

- | | | | |
|------------|-------|-----------|--------------|
| 1. 29 | 3. -1 | 5. -9 | 7. 2 |
| 2. {4; -1} | 4. 14 | 6. {1; 3} | 8. {-13; 50} |

▶ TEMEL KAVRAM – 11

- | | | | |
|---------------------------------|--------|--------|-----------------------------|
| 1. \emptyset | 3. {4} | 5. 9 | 7. $\frac{1}{2}$ |
| 2. $\left\{\frac{3}{2}\right\}$ | 4. 3 | 6. {6} | 8. a) \emptyset b) 1 c) 2 |

▶ TEMEL KAVRAM – 12

- | | | | |
|---------------------------|---------------------------|---|---------------------------|
| 1. $a(x^2 - 3x - 10) = 0$ | 3. $a(x^2 - 6x + 4) = 0$ | 5. $a(x^2 - 14x - 27) = 0$ | 7. $a(x^2 - 10x + 4) = 0$ |
| 2. $a(x - 7)^2 = 0$ | 4. $a(x^2 - 7x + 12) = 0$ | 6. $a\left(x^2 + \frac{5}{2}x + 1\right) = 0$ | 8. $a(x^2 - 18x + 1) = 0$ |



II. DERECEDEN DENKLEMLER YANIT ANAHTARI

► TEMEL KAVRAM – 13

- | | | |
|---------|-----------|----------|
| 1. $-i$ | 3. $2-2i$ | 5. $-8i$ |
| 2. i | 4. 0 | |

► TEMEL KAVRAM – 14

- | | |
|------------------|-----------|
| 1. 9 | 3. $-3+i$ |
| 2. $\frac{2}{3}$ | 4. 13 |

► TEMEL KAVRAM – 15

- | | | | | |
|---------------------|----------------------|---------|-----------|--------|
| 1. $\frac{1+3i}{2}$ | 3. $-\frac{3}{25}$ | 5. $+i$ | 7. 1 | 9. 5 |
| 2. -2 | 4. $\frac{15-5i}{2}$ | 6. -8 | 8. $-32i$ | |

► TEMEL KAVRAM – 16

- | | | | | |
|------------------|--------------------|-----------------|---------|------------------------|
| 1. $\{3i; -3i\}$ | 3. 8 | 5. $\{2; 1+i\}$ | 7. 20 | 9. $(x-1)(x^2-4x+5)=0$ |
| 2. $2\mp 2i$ | 4. $a(x^2-4x+5)=0$ | 6. 4 | 8. 4 | |