계산시 참고사항

1. 일차식과 수의 곱셈과 나눗셈
(1) (일차식)×(수): 분배법칙을 이용하여 일차식의 각 항에 수를 곱하여 계산한다.
(2) (일차식)÷(수)
 ① 분수꼴로 바꾸어 계산한다.
 ② 분배법칙을 이용하여 나누는 수의 역수를 일차식의 각 항에 곱한다.

2. 일차식의 덧셈과 뺄셈
(1) 일차식의 덧셈
 ① 괄호가 있으면 분배법칙을 이용하여 괄호를 푼다.
 ② 교환법칙을 이용하여 동류항끼리 모아서 간단하게 정리한다.
(2) 일차식의 뺄셈: 빼는 식의 괄호 안의 각 항의 부호를 바꾸어서 더한다.

💬 **분배법칙**
◉ $a(b+c)=ab+ac$
◉ $(a+b)c=ac+bc$

📌 **일차식과 수의 곱셈과 나눗셈**

☑ **다음 식을 간단히 하여라.**

1. $2x \times 3$

2. $8x \times (-3)$

3. $-9 \times (-2y)$

4. $-4a \times 7$

5. $-4x \times \dfrac{1}{2}$

6. $\dfrac{3}{5} \times (-15y)$

7. $12x \times \dfrac{5}{2}$

8. $-\dfrac{1}{7} \times 14y$

9. $0.2 \times (-5a)$

10. $(-2.5a) \times (-2)$

11. $0.5a \times (-4)$

12. $2x \times 3$

13. $-5x \times 4$

14. $-5(2x-1)$

15. $6y \times (-2)$

16. $-3x \times 5$

17. $4x \times (-3)$

18. $-4 \times (-y)$

19. $(-4+x) \times (-5)$

20. $\dfrac{5}{3}(3-6y)$

21. $\dfrac{1}{2}(-2x+4)$

22. $(16x+8) \times \left(-\dfrac{1}{4}\right)$

23. $2\left(\dfrac{1}{2}-3x\right)$

24. $0.2(5+10y)$

25. $-5\left(4x-\dfrac{2}{5}\right)$

26. $3(-2x-3)$

27. $3(2a-4)$

28. $4(-3x-5)$

29. $-2(3x-1)$

30. $(a-2) \times (-1)$

31. $(-6x) \times \left(-\dfrac{7}{3}\right)$

32. $2x \times \left(-\dfrac{3}{2}\right)$

33. $-7\left(2x-\dfrac{3}{7}\right)$

34. $(-3+2x) \times (-4)$

☑ 다음 식을 간단히 하여라.

35. $12x \div (-4)$

36. $14b \div \dfrac{7}{5}$

37. $-2y \div \left(-\dfrac{1}{3}\right)$

38. $9x \div \dfrac{1}{3}$

39. $\dfrac{3}{12}a \div (-3)$

40. $\left(-\dfrac{3}{4}a\right)\div\left(-\dfrac{3}{2}\right)$

41. $\dfrac{2}{5}a\div\left(-\dfrac{1}{10}\right)$

42. $(-8y)\div\left(-\dfrac{1}{2}\right)$

43. $16x\div(-8)$

44. $(-18y)\div 3$

45. $(-15x)\div(-5)$

46. $15a\div(-3)$

47. $\dfrac{1}{4}x\div\left(-\dfrac{3}{8}\right)$

48. $-8y\div 2$

49. $18x\div(-6)$

50. $-6y\div 3$

51. $-9a\div 3$

52. $-8b\div(-2)$

53. $(8x-24)\div 8$

54. $(-8x+12)\div 4$

55. $(-2y)\div\dfrac{1}{4}$

56. $\left(-\dfrac{2}{5}a\right)\div\left(-\dfrac{2}{15}\right)$

57. $(9x-12)\div\left(-\dfrac{3}{2}\right)$

58. $(4x+12)\div(-4)$

59. $(12x-6)\div(-6)$

60. $(8x-12)\div(-4)$

61. $(-6x+9)\div(-3)$

62. $(-10a+5)\div 5$

63. $(-5x-20)\div 5$

64. $(5x-15)\div\left(-\dfrac{5}{2}\right)$

65. $\left(\dfrac{3}{2}a-6\right)\div 3$

66. $\left(-4x-\dfrac{5}{6}\right)\div\dfrac{10}{3}$

67. $(0.2x - 0.5) \div \dfrac{1}{10}$

68. $-\dfrac{1}{2}(4x + 12) \div 3$

69. $(6y - 9) \times 4 \div 3$

70. $-5(y - 1) \div \dfrac{1}{2}$

71. $(2y + 3) \div \dfrac{2}{3} \times 4$

일차식의 덧셈과 뺄셈

☑ **다음 식을 간단히 하여라.**

72. $3x + 4x$

73. $\dfrac{1}{2}x + \dfrac{2}{3}x$

74. $4x + 8x$

75. $9a + 8a$

76. $\dfrac{4}{3}a - \dfrac{5}{4}a$

77. $5x - 2x$

78. $7y - 3y$

79. $x - 3x$

80. $-3a - 2a$

81. $\dfrac{2}{3}y - \dfrac{1}{2}y$

82. $0.3x + 0.9x$

83. $-4x + 2x + 5x$

84. $-a - 2a - 3a$

85. $4x - 11x + 9x$

86. $-6y + 2y - 3y$

87. $5a - (-7a) + 3a$

88. $a - (-2a) - 3a$

☑ **다음 식을 간단히 하여라.**

89. $(2x + 3) - (3x - 8)$

90. $-3(-2a + 1) - 5(3a - 2)$

91. $-2(4x+5)-6(x-2)$

92. $5a+7+4a+8$

93. $4x-2-3-5x$

94. $-5+6b-7-10b$

95. $-5y+16-11y-20$

96. $-3(-2a+1)-5(3a-2)$

97. $2(-3x+4)-3(-4x+1)$

98. $-(x-6)-3(2x+1)$

99. $4(-3x+1)-(3x-2)$

100. $-(3x+2)-(-4x+5)$

101. $3(-2a+1)-4(-3a-2)$

102. $a-(a+2)+3(a-1)$

103. $3(x+1)+(2x-1)-4(x-3)$

104. $3(a+1)-2(a-3)-3(a+5)$

105. $(-2y+1)+(-y+3)$

106. $(7b-3)+(-5b+9)$

107. $(-2x+5)+(8x-3)$

108. $-3(x-1)+2(2-x)$

109. $-2x+9-5(3-4x)-7$

110. $11x-(3x+7)$

111. $(2x-3)-(5x-7)$

112. $2(5x+1)-3(x-3)$

113. $3(2x-1)+(5x+1)$

114. $(-3x+5)-(4x-1)$

115. $(-9a-3)-(-5a-2)$

116. $(5a-3)-2(7a-6)$

117. $-7(x-1)+2(4x+3)$

118. $-(-5x+8)+3(3-x)$

119. $(3x+9)+2(5x-2)$

120. $3(-3x+8)+(9x+7)$

121. $2(2x-3)+3(5x-4)$

122. $4(2x+5)+3(5x-3)$

123. $2(2x-4)-3(2x-5)$

124. $4(-3x+y)-2(2x+3y)+5x-2y$

125. $2(x+1)+(4x-1)-5(x-2)$

정답 및 해설

1) $6x$

2) $-24x$
$\Rightarrow 8x\times(-3)=8\times(-3)\times x=-24x$

3) $18y$
$\Rightarrow -9\times(-2y)=-9\times(-2)\times y=18y$

4) $-28a$

5) $-2x$
$\Rightarrow -4x\times\dfrac{1}{2}=-4\times\dfrac{1}{2}\times x=-2x$

6) $-9y$
$\Rightarrow \dfrac{3}{5}\times(-15y)=\dfrac{3}{5}\times(-15)\times y=-9y$

7) $30x$
$\Rightarrow 12x\times\dfrac{5}{2}=12\times x\times\dfrac{5}{2}=12\times\dfrac{5}{2}\times x=30x$

8) $-2y$
$\Rightarrow \left(-\dfrac{1}{7}\right)\times14y=-\dfrac{1}{7}\times14\times y=-2y$

9) $-a$
$\Rightarrow 0.2\times(-5a)=0.2\times(-5)\times a=-a$

10) $5a$
$\Rightarrow (-2.5a)\times(-2)=-2.5\times a\times(-2)$
$\qquad\qquad\qquad=-2.5\times(-2)\times a=5a$

11) $-2a$
$\Rightarrow 0.5a\times(-4)=0.5\times(-4)\times a=-2a$

12) $6x$
$\Rightarrow 2x\times3=2\times x\times3=2\times3\times x=6x$

13) $-20x$
$\Rightarrow -5x\times4=-5\times x\times4=-5\times4\times x=-20x$

14) $-10x+5$
$\Rightarrow -5(2x-1)=-5\times2x-(-5)\times1=-10x+5$

15) $-12y$
$\Rightarrow 6y\times(-2)=6\times y\times(-2)=6\times(-2)\times y=-12y$

16) $-15x$
$\Rightarrow -3x\times5=-3\times x\times5=-3\times5\times x=-15x$

17) $-12x$
$\Rightarrow 4x\times(-3)=4\times x\times(-3)=4\times(-3)\times x=-12x$

18) $4y$
$\Rightarrow -4\times(-y)=-4\times(-1)\times y=4y$

19) $20-5x$
$\Rightarrow (-4+x)\times(-5)=-4\times(-5)+x\times(-5)$
$\qquad\qquad\qquad\qquad=20-5x$

20) $5-10y$
$\Rightarrow \dfrac{5}{3}(3-6y)=\dfrac{5}{3}\times3-\dfrac{5}{3}\times6y=5-10y$

21) $-x+2$
$\Rightarrow \dfrac{1}{2}(-2x+4)=\dfrac{1}{2}\times(-2x)+\dfrac{1}{2}\times4=-x+2$

22) $-4x-2$
$\Rightarrow (16x+8)\times\left(-\dfrac{1}{4}\right)=16x\times\left(-\dfrac{1}{4}\right)+8\times\left(-\dfrac{1}{4}\right)$
$\qquad\qquad\qquad\qquad=-4x-2$

23) $1-6x$
$\Rightarrow 2\left(\dfrac{1}{2}-3x\right)=2\times\dfrac{1}{2}-2\times3x=1-6x$

24) $1+2y$
$\Rightarrow 0.2(5+10y)=\dfrac{2}{10}\times5+\dfrac{2}{10}\times10y=1+2y$

25) $-20x+2$
$\Rightarrow -5\left(4x-\dfrac{2}{5}\right)=-5\times4x-(-5)\times\dfrac{2}{5}$
$\qquad\qquad\qquad\qquad=-20x+2$

26) $-6x-9$
$\Rightarrow 3(-2x-3)=3\times(-2x)-3\times3=-6x-9$

27) $6a-12$
$\Rightarrow 3(2a-4)=3\times2a-3\times4=6a-12$

28) $-12x-20$
$\Rightarrow 4(-3x-5)=4\times(-3x)-4\times5=-12x-20$

29) $-6x+2$
$\Rightarrow -2(3x-1)=-2\times3x-(-2)\times1=-6x+2$

30) $-a+2$
$\Rightarrow (a-2)\times(-1)=a\times(-1)-2\times(-1)=-a+2$

31) $14x$
$\Rightarrow (-6x)\times\left(-\dfrac{7}{3}\right)=-6\times x\times\left(-\dfrac{7}{3}\right)$
$\qquad\qquad\qquad\qquad=-6\times\left(-\dfrac{7}{3}\right)\times x=14x$

32) $-3x$

⇨ $2x \times \left(-\dfrac{3}{2}\right) = 2 \times x \times \left(-\dfrac{3}{2}\right)$
$= 2 \times \left(-\dfrac{3}{2}\right) \times x = -3x$

33) $-14x+3$
⇨ $-7\left(2x-\dfrac{3}{7}\right) = -7 \times 2x - (-7) \times \dfrac{3}{7}$
$= -14x+3$

34) $12-8x$
⇨ $(-3+2x) \times (-4) = -3 \times (-4) + 2x \times (-4)$
$= 12-8x$

35) $-3x$
⇨ $12x \div (-4) = 12 \times x \times \left(-\dfrac{1}{4}\right)$
$= 12 \times \left(-\dfrac{1}{4}\right) \times x = -3x$

36) $10b$
⇨ $14b \div \dfrac{7}{5} = 14 \times b \times \dfrac{5}{7} = 14 \times \dfrac{5}{7} \times b = 10b$

37) $6y$
⇨ $(-2y) \div \left(-\dfrac{1}{3}\right) = -2 \times y \times (-3)$
$= -2 \times (-3) \times y = 6y$

38) $27x$
⇨ $9x \div \dfrac{1}{3} = 9 \times x \times 3 = 9 \times 3 \times x = 27x$

39) $-\dfrac{a}{12}$
⇨ $\dfrac{3}{12}a \div (-3) = \dfrac{3}{12} \times a \times \left(-\dfrac{1}{3}\right)$
$= \dfrac{3}{12} \times \left(-\dfrac{1}{3}\right) \times a = -\dfrac{a}{12}$

40) $\dfrac{a}{2}$
⇨ $\left(-\dfrac{3}{4}a\right) \div \left(-\dfrac{3}{2}\right) = -\dfrac{3}{4} \times a \times \left(-\dfrac{2}{3}\right)$
$= -\dfrac{3}{4} \times \left(-\dfrac{2}{3}\right) \times a = \dfrac{a}{2}$

41) $-4a$
⇨ $\dfrac{2}{5}a \div \left(-\dfrac{1}{10}\right) = \dfrac{2}{5} \times a \times (-10)$
$= \dfrac{2}{5} \times (-10) \times a = -4a$

42) $16y$
⇨ $(-8y) \div \left(-\dfrac{1}{2}\right) = -8 \times y \times (-2)$
$= -8 \times (-2) \times y = 16y$

43) $-2x$

⇨ $16x \div (-8) = 16x \times \left(-\dfrac{1}{8}\right) = 16 \times \left(-\dfrac{1}{8}\right) \times x = -2x$

44) $-6y$
⇨ $(-18y) \div 3 = (-18y) \times \dfrac{1}{3} = -18 \times \dfrac{1}{3} \times y$
$= -6y$

45) $3x$
⇨ $(-15x) \div (-5) = (-15x) \times \left(-\dfrac{1}{5}\right)$
$= -15 \times \left(-\dfrac{1}{5}\right) \times x = 3x$

46) $-5a$

47) $-\dfrac{2}{3}x$

48) $-4y$
⇨ $(-8y) \div 2 = -8 \times y \times \dfrac{1}{2}$
$= -8 \times \dfrac{1}{2} \times y = -4y$

49) $-3x$
⇨ $18x \div (-6) = 18 \times x \times \left(-\dfrac{1}{6}\right)$
$= 18 \times \left(-\dfrac{1}{6}\right) \times x = -3x$

50) $-2y$
⇨ $-6y \div 3 = -6 \times y \times \dfrac{1}{3}$
$= -6 \times \dfrac{1}{3} \times y = -2y$

51) $-3a$
⇨ $-9a \div 3 = -9 \times a \times \dfrac{1}{3}$
$= -9 \times \dfrac{1}{3} \times a = -3a$

52) $4b$
⇨ $-8b \div (-2) = -8 \times b \times \left(-\dfrac{1}{2}\right)$
$= -8 \times \left(-\dfrac{1}{2}\right) \times b$
$= 4b$

53) $x-3$
⇨ $(8x-24) \div 8 = (8x-24) \times \dfrac{1}{8}$
$= 8x \times \dfrac{1}{8} - 24 \times \dfrac{1}{8} = x-3$

54) $-2x+3$

$\Rightarrow (-8x+12)\div 4 = (-8x+12)\times\dfrac{1}{4}$

$\qquad = -8x\times\dfrac{1}{4}+12\times\dfrac{1}{4} = -2x+3$

55) $-8y$

$\Rightarrow (-2y)\div\dfrac{1}{4} = (-2y)\times 4 = -2\times 4\times y$

$\qquad = -8y$

56) $3a$

$\Rightarrow \left(-\dfrac{2}{5}a\right)\div\left(-\dfrac{2}{15}\right) = \left(-\dfrac{2}{5}a\right)\times\left(-\dfrac{15}{2}\right)$

$\qquad = -\dfrac{2}{5}\times\left(-\dfrac{15}{2}\right)\times a = 3a$

57) $-6x+8$

$\Rightarrow (9x-12)\div\left(-\dfrac{3}{2}\right) = (9x-12)\times\left(-\dfrac{2}{3}\right)$

$\qquad = 9x\times\left(-\dfrac{2}{3}\right)-12\times\left(-\dfrac{2}{3}\right)$

$\qquad = -6x+8$

58) $-x-3$

$\Rightarrow (4x+12)\div(-4) = (4x+12)\times\left(-\dfrac{1}{4}\right)$

$\qquad = 4x\times\left(-\dfrac{1}{4}\right)+12\times\left(-\dfrac{1}{4}\right)$

$\qquad = -x-3$

59) $-2x+1$

$\Rightarrow (12x-6)\div(-6) = (12x-6)\times\left(-\dfrac{1}{6}\right)$

$\qquad = 12x\times\left(-\dfrac{1}{6}\right)-6\times\left(-\dfrac{1}{6}\right)$

$\qquad = -2x+1$

60) $-2x+3$

$\Rightarrow (8x-12)\div(-4) = (8x-12)\times\left(-\dfrac{1}{4}\right)$

$\qquad = 8x\times\left(-\dfrac{1}{4}\right)-12\times\left(-\dfrac{1}{4}\right)$

$\qquad = -2x+3$

61) $2x-3$

$\Rightarrow (-6x+9)\div(-3) = (-6x+9)\times\left(-\dfrac{1}{3}\right)$

$\qquad = -6x\times\left(-\dfrac{1}{3}\right)+9\times\left(-\dfrac{1}{3}\right)$

$\qquad = 2x-3$

62) $-2a+1$

$\Rightarrow (-10a+5)\div 5 = (-10a+5)\times\dfrac{1}{5}$

$\qquad = -10a\times\dfrac{1}{5}+5\times\dfrac{1}{5} = -2a+1$

63) $-x-4$

$\Rightarrow (-5x-20)\div 5 = (-5x-20)\times\dfrac{1}{5}$

$\qquad = -5x\times\dfrac{1}{5}-20\times\dfrac{1}{5} = -x-4$

64) $-2x+6$

$\Rightarrow (5x-15)\div\left(-\dfrac{5}{2}\right) = (5x-15)\times\left(-\dfrac{2}{5}\right)$

$\qquad = 5x\times\left(-\dfrac{2}{5}\right)-15\times\left(-\dfrac{2}{5}\right)$

$\qquad = -2x+6$

65) $\dfrac{1}{2}a-2$

$\Rightarrow \left(\dfrac{3}{2}a-6\right)\div 3 = \left(\dfrac{3}{2}a-6\right)\times\dfrac{1}{3}$

$\qquad = \dfrac{3}{2}a\times\dfrac{1}{3}-6\times\dfrac{1}{3} = \dfrac{1}{2}a-2$

66) $-\dfrac{6}{5}x-\dfrac{1}{4}$

$\Rightarrow \left(-4x-\dfrac{5}{6}\right)\div\dfrac{10}{3} = \left(-4x-\dfrac{5}{6}\right)\times\dfrac{3}{10}$

$\qquad = (-4x)\times\dfrac{3}{10}-\dfrac{5}{6}\times\dfrac{3}{10}$

$\qquad = -\dfrac{6}{5}x-\dfrac{1}{4}$

67) $2x-5$

$\Rightarrow (0.2x-0.5)\div\dfrac{1}{10} = \left(\dfrac{2}{10}x-\dfrac{5}{10}\right)\times 10$

$\qquad = \dfrac{2}{10}x\times 10-\dfrac{5}{10}\times 10$

$\qquad = 2x-5$

68) $-\dfrac{2}{3}x-2$

$\Rightarrow -\dfrac{1}{2}(4x+12)\div 3 = (-2x-6)\div 3$

$\qquad = (-2x-6)\times\dfrac{1}{3}$

$\qquad = -\dfrac{2}{3}x-2$

69) $8y-12$

$\Rightarrow (6y-9)\times 4\div 3 = (24y-36)\div 3$

$\qquad = (24y-36)\times\dfrac{1}{3}$

$\qquad = 8y-12$

70) $-10y+10$

$\Rightarrow -5(y-1)\div\dfrac{1}{2} = (-5y+5)\div\dfrac{1}{2}$

$\qquad = (-5y+5)\times 2$

$\qquad = -10y+10$

71) $12y+18$

$\Rightarrow \ (2y+3) \div \dfrac{2}{3} \times 4 = (2y+3) \times \dfrac{3}{2} \times 4$
$$= (2y+3) \times 6$$
$$= 12y+18$$

72) $7x$

73) $\dfrac{7}{6}x$

$\Rightarrow \ \dfrac{3}{6}x + \dfrac{4}{6}x = \dfrac{7}{6}x$

74) $12x$

75) $17a$

$\Rightarrow \ 9a+8a = (9+8) \times a = 17a$

76) $\dfrac{1}{12}a$

77) $3x$

$\Rightarrow \ 5x-2x = (5-2) \times x = 3x$

78) $4y$

$\Rightarrow \ 7y-3y = (7-3) \times y = 4y$

79) $-2x$

$\Rightarrow \ x-3x = (1-3) \times x = -2x$

80) $-5a$

$\Rightarrow \ -3a-2a = (-3-2) \times a = -5a$

81) $\dfrac{1}{6}y$

$\Rightarrow \ \dfrac{2}{3}y - \dfrac{1}{2}y = \left(\dfrac{2}{3} - \dfrac{1}{2}\right) \times y = \left(\dfrac{4}{6} - \dfrac{3}{6}\right) \times y = \dfrac{1}{6}y$

82) $1.2x$

$\Rightarrow \ 0.3x+0.9x = (0.3+0.9) \times x = 1.2x$

83) $3x$

$\Rightarrow \ -4x+2x+5x = (-4+2+5) \times x = 3x$

84) $-6a$

$\Rightarrow \ -a-2a-3a = (-1-2-3) \times a = -6a$

85) $2x$

$\Rightarrow \ 4x-11x+9x = (4-11+9) \times x = 2x$

86) $-7y$

$\Rightarrow \ -6y+2y-3y = (-6+2-3) \times y = -7y$

87) $15a$

$\Rightarrow \ 5a-(-7a)+3a = (5+7+3) \times a = 15a$

88) 0

$\Rightarrow \ a-(-2a)-3a = (1+2-3) \times a = 0$

89) $-x+11$

90) $-9a+7$

$\Rightarrow$ (주어진 식)$= 6a-3-15a+10 = -9a+7$

91) $-14x+2$

$\Rightarrow$ (주어진 식)
$$= -8x-10-6x+12 = -14x+2$$

92) $9a+15$

$\Rightarrow$ (주어진 식)$= 5a+4a+7+8 = 9a+15$

93) $-x-5$

$\Rightarrow$ (주어진 식)$= 4x-5x-2-3 = -x-5$

94) $-4b-12$

$\Rightarrow$ (주어진 식)$= 6b-10b-5-7$
$$= -4b-12$$

95) $-16y-4$

$\Rightarrow$ (주어진 식)$= -5y-11y+16-20$
$$= -16y-4$$

96) $-9a+7$

$\Rightarrow$ (주어진 식)$= 6a-3-15a+10 = -9a+7$

97) $6x+5$

$\Rightarrow$ (주어진 식)$= -6x+8+12x-3$
$$= -6x+12x+8-3$$
$$= 6x+5$$

98) $-7x+3$

$\Rightarrow$ (주어진 식)$= -x+6-6x-3$
$$= -x-6x+6-3$$
$$= -7x+3$$

99) $-15x+6$

$\Rightarrow$ (주어진 식)$= -12x+4-3x+2$
$$= -12x-3x+4+2$$
$$= -15x+6$$

100) $x-7$

$\Rightarrow$ (주어진 식)$= -3x-2+4x-5$
$$= -3x+4x-2-5$$
$$= x-7$$

101) $6a+11$

$\Rightarrow$ (주어진 식)$= -6a+3+12a+8$
$$= -6a+12a+3+8$$
$$= 6a+11$$

102) $3a-5$

$\Rightarrow$ (주어진 식)$= a-a-2+3a-3$
$$= a-a+3a-2-3$$
$$= 3a-5$$

103) $x+14$

$\Rightarrow$ (주어진 식)$=3x+3+2x-1-4x+12$
$\qquad = 3x+2x-4x+3-1+12$
$\qquad = x+14$

104) $-2a-6$
$\Rightarrow$ (주어진 식)$=3a+3-2a+6-3a-15$
$\qquad = 3a-2a-3a+3+6-15$
$\qquad = -2a-6$

105) $-3y+4$
$\Rightarrow$ (주어진 식)$=-2y+1-y+3$
$\qquad = -2y-y+1+3=-3y+4$

106) $2b+6$
$\Rightarrow$ (주어진 식)$=7b-3-5b+9$
$\qquad = 7b-5b-3+9=2b+6$

107) $6x+2$

108) $-5x+7$
$\Rightarrow$ (주어진 식)$=-3x+3+4-2x=-5x+7$

109) $18x-13$
$\Rightarrow$ $-2x+9-5(3-4x)-7$
$\quad = -2x+9-15+20x-7$
$\quad = 18x-13$

110) $8x-7$
$\Rightarrow$ (주어진 식)$=11x-3x-7=8x-7$

111) $-3x+4$
$\Rightarrow$ (주어진 식)$=2x-3-5x+7$
$\qquad = 2x-5x-3+7$
$\qquad = -3x+4$

112) $7x+11$
$\Rightarrow$ $2(5x+1)-3(x-3)=10x+2-3x+9=7x+11$

113) $11x-2$
$\Rightarrow$ $3(2x-1)+(5x+1)=6x-3+5x+1=11x-2$

114) $-7x+6$
$\Rightarrow$ (주어진 식)$=-3x+5-4x+1$
$\qquad = -3x-4x+5+1$
$\qquad = -7x+6$

115) $-4a-1$
$\Rightarrow$ (주어진 식)$=-9a-3+5a+2$
$\qquad = -9a+5a-3+2$
$\qquad = -4a-1$

116) $-9a+9$
$\Rightarrow$ $5a-3-14a+12=-9a+9$

117) $x+13$
$\Rightarrow$ $-7(x-1)+2(4x+3)=-7x+7+8x+6=x+13$

118) $2x+1$

$\Rightarrow$ $-(-5x+8)+3(3-x)=5x-8+9-3x=2x+1$

119) $13x+5$
$\Rightarrow$ $(3x+9)+2(5x-2)=3x+9+10x-4=13x+5$

120) 31
$\Rightarrow$ $3(-3x+8)+(9x+7)=-9x+24+9x+7=31$

121) $19x-18$
$\Rightarrow$ $2(2x-3)+3(5x-4)=4x-6+15x-12=19x-18$

122) $23x+11$
$\Rightarrow$ $4(2x+5)+3(5x-3)=8x+20+15x-9=23x+11$

123) $-2x+7$
$\Rightarrow$ (주어진 식)$=4x-8-6x+15=-2x+7$

124) $-11x-4y$
$\Rightarrow$ $-12x+4y-4x-6y+5x-2y$
$\quad = -11x-4y$

125) $x+11$
$\Rightarrow$ (주어진 식)$=2x+2+4x-1-5x+10$
$\qquad = 2x+4x-5x+2-1+10$
$\qquad = x+11$