

第十八課

1. $3(x + 1) = 5(x + 2)$

$$3x + 3 = 5x + 10$$

$$3x - 5x = 10 - 3$$

$$-2x = 7$$

$$x = -\frac{7}{2}$$

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

$$-2x - 2 = 3x + 6$$

$$-2x - 3x = 6 + 2$$

$$-5x = 8$$

$$x = -\frac{8}{5}$$

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

$$-2x + 2 = x + 2$$

$$-2x - x = 2 - 2$$

$$-3x = 0$$

$$x = 0$$

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

$$5x + 5 = 2x - 2$$

$$5x - 2x = -2 - 5$$

$$3x = -7$$

$$x = -\frac{7}{3}$$

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

$$x + 2 = 3x - 3$$

$$x - 3x = -3 - 2$$

$$-2x = -5$$

$$x = \frac{5}{2}$$

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

$$-4x + 2 = x + 3$$

$$-4x - x = 3 - 2$$

$$-5x = 1$$

$$x = -\frac{1}{5}$$

$$7. (2x - 1) = -3(x + 1)$$

$$2x - 1 = -3x - 3$$

$$2x + 3x = -3 + 1$$

$$5x = -2$$

$$x = -\frac{2}{5}$$

$$8. (x + 2) = -3(x - 4)$$

$$x + 2 = -3x + 12$$

$$x + 3x = 12 - 2$$

$$4x = 10$$

$$x = \frac{10}{4}$$

$$x = \frac{5}{2}$$

$$9. 2(x - 1) = -3(x + 2)$$

$$2x - 2 = -3x - 6$$

$$2x + 3x = -6 + 2$$

$$5x = -4$$

$$x = -\frac{4}{5}$$

$$10. 5(x - 1) = 6(x + 2)$$

$$5x - 5 = 6x + 12$$

$$5x - 6x = 12 + 5$$

$$-x = 17$$

$$x = -17$$

$$11. 3(x - 1) = 2(2x + 1)$$

$$3x - 3 = 4x + 2$$

$$3x - 4x = 2 + 3$$

$$-x = 5$$

$$x = -5$$

$$12. 2(x + 2) = (x - 3)$$

$$2x + 4 = x - 3$$

$$2x - x = -3 - 4$$

$$x = -7$$

$$13. -3(x + 2) = 2(x - 2)$$

$$-3x - 6 = 2x - 4$$

$$-3x - 2x = -4 + 6$$

$$-5x = 2$$

$$x = -\frac{2}{5}$$

$$14. -(x + 2) = 3(x + 4)$$

$$-x - 2 = 3x + 12$$

$$-x - 3x = 12 + 2$$

$$-4x = 14$$

$$x = -\frac{14}{4}$$

$$x = -\frac{7}{2}$$

$$15. 2(x + 1) = -3(x - 1)$$

$$2x + 2 = -3x + 4$$

$$2x + 3x = 4 - 2$$

$$5x = 2$$

$$x = \frac{2}{5}$$

習題

1. $(x + 2) = 3(x - 1)$
2. $-(x + 2) = 3(x - 1)$
3. $(x - 2) = 3(x - 4)$
4. $-2(x + 1) = 3(x - 1)$
5. $3(x - 1) = -2(x + 1)$
6. $3(x - 1) = 2(x + 1)$
7. $-3(x - 1) = 2(x + 1)$
8. $2(x + 1) = (x + 3)$
9. $-(x + 1) = x + 3$
10. $3(2x - 1) = 5(x - 2)$
11. $-3(2x - 1) = 5(x - 2)$
12. $(-x + 1) = (-2x + 3)$
13. $(2x - 1) = (-2x + 3)$
14. $(3x - 1) = -2(x + 2)$
15. $-(3x - 1) = (x + 2)$

解答

1. $x = \frac{5}{2}$

2. $x = \frac{1}{4}$

3. $x = 5$

4. $x = \frac{1}{5}$

5. $x = \frac{1}{5}$

6. $x = 5$

7. $x = \frac{1}{5}$

8. $x = 1$

9. $x = -2$

10. $x = -13$

11. $x = \frac{13}{11}$

12. $x = 2$

13. $x = 1$

14. $x = -\frac{3}{5}$

15. $x = -\frac{1}{4}$