

第二十二課

$$1. \frac{x}{3} = \frac{x-1}{2}$$

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

$$2x = 3x - 3$$

$$-x = -3$$

$$x = 3$$

$$2. \frac{x-1}{3} = \frac{x+1}{2}$$

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

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

$$-x = 5$$

$$x = -5$$

$$3. \frac{2x-1}{2} = \frac{x+1}{3}$$

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

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

$$4x = 5$$

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

$$4. \frac{x}{3} = \frac{2(x-1)+3(x+2)}{2}$$

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

$$2x = 6(x-1) + 9(x+2)$$

$$2x = 6x - 6 + 9x + 18$$

$$2x - 6x - 9x = 12$$

$$-13x = 12$$

$$x = -\frac{12}{13}$$

$$5. \frac{x}{3} = \frac{2x-1}{2}$$

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

$$2x = 6x - 3$$

$$-4x = -3$$

$$x = \frac{3}{4}$$

$$6. \frac{x+1}{5} = \frac{x-2}{2}$$

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

$$2x+2 = 5x-10$$

$$-3x = -8$$

$$x = \frac{8}{3}$$

$$7. \frac{-(x-2)}{2} = \frac{x+1}{3}$$

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

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

$$-5x = -4$$

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

$$8. \frac{x+2}{2} = \frac{2x-1}{5}$$

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

$$5x+10 = 4x-2$$

$$x = -12$$

$$9. \frac{-x+3}{3} = \frac{x-1}{2}$$

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

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

$$-5x = -9$$

$$x = \frac{9}{5}$$

$$10. \frac{x+1}{4} = \frac{x-1}{3}$$

$$3(x+1) = 4(x-1)$$

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

$$-x = -7$$

$$x = 7$$

$$11. \frac{x+2}{2} = \frac{x-1}{3}$$

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

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

$$x = -8$$

$$12. \frac{x+1}{3} = \frac{x-1}{5}$$

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

$$5x+5 = 3x-3$$

$$2x = -8$$

$$x = -4$$

$$13. \frac{2x-1}{2} = \frac{x+1}{3}$$

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

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

$$4x = 5$$

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

$$14. \frac{2x-1}{3} = \frac{x+1}{2}$$

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

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

$$x = 5$$

$$15. \frac{x+1}{x-1} = \frac{2}{3}$$

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

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

$$x = -5$$

$$16. \frac{2x-1}{3x-2} = \frac{1}{2}$$

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

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

$$x = 0$$

$$17. \frac{2x-3}{x+4} = \frac{3}{2}$$

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

$$4x-6 = 3x+12$$

$$x = 6$$

$$18. \frac{-x+2}{x+3} = \frac{2}{3}$$

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

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

$$-5x = 0$$

$$x = 0$$

$$19. \frac{3x-1}{x+2} = \frac{1}{2}$$

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

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

$$5x = 4$$

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

習題

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

$$2. \frac{-3(x-1)}{2} = \frac{2(x+1)}{5}$$

$$3. \frac{x+1}{3} = \frac{x-1}{2}$$

$$4. \frac{x-1}{2} = \frac{x+1}{5}$$

$$5. \frac{-2(x-1)}{3} = \frac{x+1}{2}$$

$$6. \frac{x-1}{3} = \frac{x+3}{5}$$

$$7. \frac{x-1}{3} = \frac{3(x-1)+4}{2}$$

$$8. \frac{x+1}{2} = \frac{2x-1}{3}$$

$$9. \frac{x-1}{2} = \frac{-(x+1)}{3}$$

$$10. \frac{2x-1}{3} = \frac{x+2}{2}$$

$$11. \frac{x+2}{2} = \frac{x-1}{3}$$

$$12. \frac{-(x-1)}{3} = \frac{x-2}{2}$$

$$13. \frac{2(x-1)}{3} = \frac{x+1}{2}$$

$$14. \frac{-3(x+1)}{2} = \frac{x}{3}$$

$$15. \frac{x+2}{2} = \frac{x-1}{3}$$

$$16. \frac{2x-1}{x+2} = \frac{2}{3}$$

$$17. \frac{2(x-1)}{3(x+1)} = \frac{1}{2}$$

$$18. \frac{-2(x+2)}{3(x-1)} = \frac{2}{3}$$

$$19. \frac{3(x-2)}{x+2} = \frac{1}{2}$$

答案

1. $x = 3$

2. $x = \frac{5}{13}$

3. $x = 5$

4. $x = \frac{7}{3}$

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

6. $x = 7$

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

8. $x = 5$

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

10. $x = 8$

11. $x = -8$

12. $x = \frac{8}{5}$

13. $x = 5$

14. $x = -\frac{9}{11}$

15. $x = -8$

16. $x = \frac{7}{4}$

17. $x = 7$

18. $x = -\frac{1}{2}$

19. $x = \frac{14}{5}$