

### 同類項をまとめる3 通分をする その1

(1) 
$$\frac{-a+3b}{6} + \frac{-a+2b}{4}$$

(2) 
$$\frac{-6a-b}{8} + \frac{-a+2b}{4}$$

(3) 
$$-\frac{3a-5b}{6} + \frac{a-3b}{4}$$

(4) 
$$\frac{-3a-4b}{8} + \frac{3a-b}{6}$$

(5) 
$$\frac{-15a-16b}{20} + \frac{5a-8b}{10}$$

(6) 
$$\frac{-10x+9y}{12} + \frac{3x+2y}{4}$$

(7) 
$$\frac{a-b}{2} + \frac{2a+b}{4}$$

(8) 
$$-\frac{a+b}{2} + \frac{2a+7b}{8}$$

(9) 
$$\frac{3a-2b}{6} - \frac{9a+8b}{12}$$

(10) 
$$-\frac{3x+2y}{6} + \frac{27x-64y}{72}$$

(11) 
$$-\frac{6a-7b}{9} + \frac{2a+3b}{18}$$

(12) 
$$\frac{-4x+5y}{6} + \frac{-20x-3y}{24}$$

## 同類項をまとめる3 通分をする その2

(1) 
$$-\frac{4a+9b}{12} - \frac{2a-3b}{6}$$

(2) 
$$\frac{-a+b}{3} - \frac{3a+8b}{9}$$

(3) 
$$\frac{2x+y}{3} + \frac{5x-5y}{6}$$

(4) 
$$\frac{16a-9b}{18} + \frac{-2a-3b}{6}$$

(5) 
$$\frac{-3x-y}{6} + \frac{3x+4y}{12}$$

(6) 
$$\frac{-2a-b}{6} + \frac{-3a+8b}{9}$$

(7) 
$$\frac{-3x+4y}{6} + \frac{9x-20y}{24}$$

(8) 
$$\frac{-a-b}{2} + \frac{-2a-3b}{4}$$

(9) 
$$\frac{2x-3y}{6} + \frac{16x+21y}{24}$$

(10) 
$$-\frac{3x-2y}{4} + \frac{-4x-7y}{8}$$

(11) 
$$\frac{-21x+12y}{28} + \frac{-7x+8y}{56}$$

(12) 
$$\frac{-48a+35b}{56} + \frac{-20a+7b}{28}$$

### 同類項をまとめる3 通分をする その3

(1) 
$$-\frac{21a - 4b}{24} + \frac{3a + 4b}{6}$$

(2) 
$$-\frac{3x + y}{6} + \frac{-x + y}{2}$$

(3) 
$$\frac{4x + 3y}{9} + \frac{-x + y}{3}$$

(4) 
$$\frac{-9x - 8y}{12} + \frac{-9x - 2y}{18}$$

(5) 
$$\frac{3a + 16b}{18} - \frac{3a + 2b}{6}$$

(6) 
$$-\frac{3x - 2y}{4} + \frac{x + y}{2}$$

(7) 
$$\frac{7x + 4y}{14} + \frac{21x + 48y}{56}$$

(8) 
$$\frac{2a + b}{3} + \frac{-2a + 5b}{9}$$

(9) 
$$-\frac{20a - 21b}{24} - \frac{a + b}{2}$$

(10) 
$$-\frac{5x - 3y}{6} + \frac{x + y}{2}$$

(11) 
$$-\frac{15x + 16y}{18} + \frac{27x + 8y}{36}$$

(12) 
$$\frac{6a - 5b}{8} - \frac{15a - 20b}{24}$$

### 同類項をまとめる3 通分をする その4

(1)  $\frac{3a+4b}{6} + \frac{-15a+16b}{24}$

(2)  $\frac{5a-3b}{6} + \frac{8a-9b}{36}$

(3)  $\frac{16a-15b}{40} - \frac{8a+5b}{10}$

(4)  $\frac{-4a+b}{8} + \frac{-3a-5b}{6}$

(5)  $-\frac{8x+9y}{36} - \frac{4x+3y}{6}$

(6)  $\frac{9a+8b}{12} + \frac{27a+8b}{36}$

(7)  $\frac{a-b}{2} + \frac{-3a+7b}{8}$

(8)  $-\frac{x-2y}{4} + \frac{3x-7y}{8}$

(9)  $\frac{-3x+4y}{6} + \frac{27x-8y}{36}$

(10)  $-\frac{3a+b}{9} + \frac{-2a+2b}{3}$

(11)  $\frac{2x+5y}{6} + \frac{x+y}{3}$

(12)  $\frac{9a-4b}{12} + \frac{-21a-8b}{24}$

## 同類項をまとめる3 通分をする その5

(1) 
$$\frac{27x + 32y}{36} + \frac{-x - 4y}{6}$$

(2) 
$$-\frac{8x - 9y}{12} + \frac{2x - 3y}{6}$$

(3) 
$$\frac{14x + 9y}{18} + \frac{-8x - 3y}{24}$$

(4) 
$$\frac{-a + 4b}{6} + \frac{9a + 16b}{18}$$

(5) 
$$\frac{4x + 15y}{18} - \frac{8x - 3y}{9}$$

(6) 
$$\frac{4a + 3b}{6} + \frac{-8a - 15b}{24}$$

(7) 
$$\frac{-9x - 8y}{18} + \frac{3x + 4y}{24}$$

(8) 
$$\frac{8a + 9b}{18} + \frac{-4a - 5b}{6}$$

(9) 
$$\frac{15x + 8y}{18} + \frac{3x + 2y}{6}$$

(10) 
$$\frac{-x + y}{2} + \frac{x + 3y}{6}$$

(11) 
$$\frac{-3x + 4y}{8} + \frac{3x + 3y}{4}$$

(12) 
$$\frac{5x + 4y}{10} + \frac{15x - 4y}{20}$$

## 同類項をまとめる3 通分をする その6

$$(1) \quad \frac{5a - 3b}{6} + \frac{8a + 9b}{72}$$

$$(2) \quad \frac{-x + y}{2} + \frac{3x + 2y}{4}$$

$$(3) \quad -\frac{x + y}{4} - \frac{3x - 4y}{8}$$

$$(4) \quad \frac{x + 2y}{3} + \frac{-5x + 6y}{9}$$

$$(5) \quad -\frac{2x - 3y}{9} + \frac{5x - 4y}{6}$$

$$(6) \quad \frac{45x - 32y}{72} + \frac{-3x - 4y}{6}$$

$$(7) \quad -\frac{5x - 2y}{6} + \frac{6x - 5y}{9}$$

$$(8) \quad -\frac{6x + 3y}{8} + \frac{x - 2y}{4}$$

$$(9) \quad \frac{3x + 2y}{6} + \frac{-63x - 32y}{72}$$

$$(10) \quad \frac{25a - 16b}{40} + \frac{5a - 6b}{10}$$

$$(11) \quad \frac{x - 3y}{4} + \frac{x - y}{2}$$

$$(12) \quad \frac{-3x + 10y}{12} + \frac{x + y}{2}$$

### 同類項をまとめる3 通分をする その7

(1)  $\frac{4x - 6y}{9} + \frac{-5x + y}{6}$

(2)  $-\frac{3a - 2b}{6} + \frac{-9a - 10b}{12}$

(3)  $\frac{3x + 5y}{9} + \frac{x + y}{6}$

(4)  $-\frac{a + 2b}{3} + \frac{4a - b}{6}$

(5)  $\frac{-2a + 3b}{6} + \frac{-16a - 15b}{24}$

(6)  $-\frac{2x - 9y}{12} + \frac{x - y}{2}$

(7)  $\frac{-3x - 5y}{6} - \frac{4x + 5y}{8}$

(8)  $-\frac{2a + 5b}{6} + \frac{56a - 9b}{72}$

(9)  $\frac{-4x + 3y}{6} - \frac{4x - 3y}{12}$

(10)  $\frac{2a + b}{4} + \frac{-5a - 3b}{6}$

(11)  $\frac{9a + 4b}{18} + \frac{3a + 4b}{6}$

(12)  $\frac{9x - 2y}{12} + \frac{-4x + 5y}{8}$

### 同類項をまとめる3 通分をする その8

(1) 
$$\frac{-5a - 16b}{20} - \frac{5a + 8b}{40}$$

(2) 
$$-\frac{8x - 5y}{40} + \frac{8x + 5y}{10}$$

(3) 
$$\frac{35a + 12b}{42} - \frac{14a - 15b}{21}$$

(4) 
$$\frac{21a - 20b}{28} + \frac{7a - 8b}{56}$$

(5) 
$$\frac{4x + 3y}{12} + \frac{2x - y}{6}$$

(6) 
$$\frac{-a + b}{2} + \frac{2a - 9b}{12}$$

(7) 
$$\frac{2a - 7b}{8} - \frac{a - b}{2}$$

(8) 
$$\frac{-3x - 5y}{6} + \frac{2x - 5y}{8}$$

(9) 
$$\frac{-9x - 16y}{18} + \frac{5x + 4y}{6}$$

(10) 
$$-\frac{9x - 2y}{18} + \frac{9x - 8y}{24}$$

(11) 
$$\frac{-x + 4y}{8} - \frac{2x + 3y}{4}$$

(12) 
$$-\frac{3x - 2y}{6} + \frac{-3x + 16y}{24}$$

## 同類項をまとめる3 通分をする その9

(1) 
$$\frac{x-4y}{6} + \frac{-2x-2y}{3}$$

(2) 
$$\frac{10a-9b}{12} + \frac{-5a+4b}{8}$$

(3) 
$$\frac{3a-5b}{6} + \frac{9a-32b}{36}$$

(4) 
$$\frac{27a-20b}{36} + \frac{a-2b}{6}$$

(5) 
$$-\frac{4x-3y}{12} + \frac{10x+9y}{18}$$

(6) 
$$\frac{15a+4b}{20} + \frac{5a+4b}{10}$$

(7) 
$$\frac{-10a+3b}{12} - \frac{8a+15b}{24}$$

(8) 
$$\frac{x-y}{2} + \frac{3x+2y}{8}$$

(9) 
$$\frac{9a-4b}{24} + \frac{2a-b}{4}$$

(10) 
$$-\frac{10a-3b}{12} + \frac{a-2b}{4}$$

(11) 
$$\frac{3a-b}{6} + \frac{2a+7b}{8}$$

(12) 
$$\frac{-a+3b}{9} - \frac{a+2b}{3}$$

### 同類項をまとめる3 通分をする その10

(1) 
$$\frac{8a+3b}{12} - \frac{2a+3b}{6}$$

(2) 
$$\frac{8a-5b}{40} + \frac{4a-5b}{10}$$

(3) 
$$\frac{a-6b}{9} - \frac{4a+b}{6}$$

(4) 
$$\frac{-a+3b}{6} + \frac{5a+4b}{8}$$

(5) 
$$\frac{4x+3y}{12} - \frac{16x+27y}{72}$$

(6) 
$$\frac{8x+3y}{12} + \frac{16x-3y}{18}$$

(7) 
$$-\frac{9x+16y}{36} + \frac{3x+2y}{6}$$

(8) 
$$\frac{-4a+5b}{9} - \frac{2a+b}{3}$$

(9) 
$$\frac{a+b}{4} + \frac{a+b}{2}$$

(10) 
$$\frac{-3x-y}{8} - \frac{3x+2y}{4}$$

(11) 
$$\frac{x+y}{2} + \frac{4x+7y}{8}$$

(12) 
$$-\frac{7x+8y}{14} + \frac{21x+12y}{28}$$

### 同類項をまとめる3 通分をする その11

(1) 
$$\frac{-24a - 35b}{40} + \frac{8a - 15b}{20}$$

(2) 
$$\frac{4x + 5y}{6} + \frac{-8x + 9y}{36}$$

(3) 
$$\frac{3x - y}{6} + \frac{27x - 64y}{72}$$

(4) 
$$-\frac{x + 2y}{4} + \frac{x - y}{2}$$

(5) 
$$\frac{3x - 10y}{12} + \frac{-x + y}{2}$$

(6) 
$$\frac{a + 3b}{6} + \frac{a + b}{2}$$

(7) 
$$\frac{-15a + 4b}{20} + \frac{15a + 24b}{40}$$

(8) 
$$\frac{4a + b}{8} - \frac{3a - 2b}{4}$$

(9) 
$$-\frac{2x - 2y}{3} + \frac{-7x - 3y}{9}$$

(10) 
$$\frac{32a - 27b}{72} + \frac{4a + 3b}{6}$$

(11) 
$$\frac{3a + 8b}{12} + \frac{27a - 16b}{36}$$

(12) 
$$\frac{-3x - 5y}{9} + \frac{2x - 3y}{18}$$

### 同類項をまとめる3 通分をする その12

(1) 
$$\frac{3x+8y}{18} + \frac{3x-8y}{9}$$

(2) 
$$-\frac{5a+3b}{6} - \frac{8a+15b}{18}$$

(3) 
$$-\frac{15x+8y}{20} + \frac{-5x+2y}{10}$$

(4) 
$$\frac{-3a+b}{6} - \frac{9a-10b}{12}$$

(5) 
$$\frac{-4x+3y}{9} + \frac{2x-2y}{3}$$

(6) 
$$\frac{-3a-4b}{6} + \frac{27a-8b}{36}$$

(7) 
$$\frac{-2a-b}{4} + \frac{a-3b}{6}$$

(8) 
$$-\frac{27x-40y}{72} - \frac{3x+2y}{6}$$

(9) 
$$-\frac{5x-6y}{9} - \frac{2x+y}{3}$$

(10) 
$$-\frac{9x-8y}{36} + \frac{3x+4y}{6}$$

(11) 
$$\frac{8a-9b}{12} - \frac{4a+9b}{24}$$

(12) 
$$\frac{-2a-3b}{4} + \frac{3a+4b}{8}$$