

解答

1. 不定積分（整係数）その 1

(1) $\frac{1}{2}x^4 - 2x^2 - 2x + C$

(2) $\frac{1}{4}x^4 + \frac{3}{2}x^2 + 8x + C$

(3) $2x^3 - \frac{7}{2}x^2 - 7x + C$

(4) $\frac{5}{4}x^4 + \frac{4}{3}x^3 + 3x^2 + 8x + C$

(5) $\frac{3}{4}x^4 - \frac{8}{3}x^3 + 4x + C$

(6) $-x^4 + \frac{4}{3}x^3 - \frac{5}{2}x^2 + 6x + C$

(7) $2x^4 + 3x^3 + \frac{7}{2}x^2 - 7x + C$

(8) $\frac{3}{4}x^4 + 8x + C$

(9) $\frac{9}{4}x^4 + 3x^3 - 2x^2 - 6x + C$

(10) $-2x^3 + 7x + C$

(11) $2x^4 + \frac{4}{3}x^3 - \frac{5}{2}x^2 + 3x + C$

(12) $-\frac{1}{4}x^4 + \frac{8}{3}x^3 + \frac{7}{2}x^2 + C$

(13) $\frac{8}{3}x^3 + \frac{1}{2}x^2 + 8x + C$

(14) $\frac{9}{4}x^4 + \frac{7}{3}x^3 + x^2 - 8x + C$

(15) $x^4 - 4x + C$

2. 不定積分（整係数）その 2

(1) $\frac{5}{3}x^3 + 4x + C$

(2) $\frac{1}{2}x^4 + x^3 - 3x^2 + C$

(3) $\frac{5}{4}x^4 + \frac{1}{2}x^2 + C$

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

(5) $\frac{1}{2}x^4 + \frac{5}{3}x^3 + C$

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

(7) $\frac{7}{4}x^4 + 2x^3 + C$

(8) $3x^3 + 3x + C$

(9) $\frac{5}{4}x^4 + \frac{5}{3}x^3 + 4x + C$

(10) $-x^4 - 3x + C$

(11) $\frac{3}{2}x^4 + \frac{1}{2}x^2 - 4x + C$

(12) $\frac{1}{3}x^3 + \frac{7}{2}x^2 + 6x + C$

(13) $\frac{9}{4}x^4 + \frac{5}{3}x^3 + 4x^2 + C$

(14) $2x^4 + 4x + C$

(15) $-\frac{5}{4}x^4 + \frac{3}{2}x^2 + C$

3. 不定積分（整係数）その 3

(1) $\frac{9}{4}x^4 + \frac{1}{3}x^3 - 2x + C$

(2) $\frac{1}{4}x^4 + x^3 + \frac{5}{2}x^2 + 3x + C$

(3) $2x^4 + \frac{8}{3}x^3 + \frac{1}{2}x^2 + 8x + C$

(4) $\frac{9}{4}x^4 + x^2 + x + C$

(5) $\frac{7}{4}x^4 + \frac{5}{3}x^3 + 7x + C$

(6) $-\frac{7}{4}x^4 + \frac{5}{3}x^3 + 4x^2 + C$

(7) $\frac{1}{4}x^4 + 2x^2 + C$

(8) $x^4 + \frac{8}{3}x^3 - x^2 + C$

(9) $\frac{4}{3}x^3 - \frac{3}{2}x^2 + C$

(10) $-\frac{1}{2}x^4 + \frac{1}{3}x^3 + x^2 + C$

(11) $\frac{5}{4}x^4 + \frac{2}{3}x^3 + C$

(12) $\frac{3}{2}x^4 + \frac{4}{3}x^3 - 5x + C$

(13) $\frac{1}{2}x^4 - 5x + C$

(14) $x^4 + \frac{1}{3}x^3 + C$

(15) $\frac{3}{2}x^4 + x + C$

4. 不定積分（整係数）その 4

(1) $\frac{5}{4}x^4 + \frac{1}{2}x^2 - 7x + C$

(2) $-\frac{7}{4}x^4 + \frac{4}{3}x^3 - 2x + C$

(3) $2x^3 - x^2 - 5x + C$

(4) $\frac{3}{2}x^4 + \frac{8}{3}x^3 + 4x^2 - 3x + C$

(5) $\frac{5}{3}x^3 + \frac{1}{2}x^2 - 2x + C$

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

(7) $\frac{4}{3}x^3 + 4x^2 + C$

(8) $\frac{5}{4}x^4 + x^3 - \frac{5}{2}x^2 - 4x + C$

(9) $\frac{2}{3}x^3 - \frac{7}{2}x^2 + 5x + C$

(10) $-\frac{3}{4}x^4 + 9x + C$

(11) $\frac{3}{2}x^4 + 7x + C$

(12) $\frac{3}{4}x^4 + 2x^2 - 7x + C$

(13) $-\frac{7}{3}x^3 - 2x^2 + C$

(14) $\frac{3}{4}x^4 - \frac{1}{3}x^3 - \frac{5}{2}x^2 - 5x + C$

(15) $\frac{9}{4}x^4 + 3x^2 - 3x + C$