1. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(8x^8)' =$

(2) $(-x^6)' =$

(3) $(4x)' =$

(4) $(-6)' =$

(5) $(-3x^7)' =$

(6) $(2x^9)' =$

(7) $\left(2x^3 - 5x^2 + 6x\right)' =$

(8) $\left(3x^4 + 3x^2 + 2x\right)' =$

(9) $\left(-x^5 - 3x^4 + x^2\right)' =$

(10) $\left(5x^3 + 6x + 1\right)' =$

(11) $\{(x-4)(2x+6)\}' = (x-4)'(2x+6) + (x-4)(2x+6)'$

$= 1 \cdot (2x+6) + (x-4) \cdot 2$

$=$

(12) $\{(3x-4)(-x+6)\}' =$

(13) $\{(x-8)(2x-9)\}' =$

(14) $\{\left(x^2+3x+1\right)(2x+4)\}' = \left(x^2+3x+1\right)'(2x+4) + \left(x^2+3x+1\right)(2x+4)'$

$= (2x+3) \cdot (2x+4) + \left(x^2+3x+1\right) \cdot 2$

$=$

(15) $\{\left(x^2+x+8\right)(x+3)\}' =$

(16) $\{(2x+5)\left(x^2+2x+10\right)\}' =$

2. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(-4x^3)' =$

(2) $(5x^2)' =$

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

(4) $(6)' =$

(5) $(-5x^6)' =$

(6) $(8x^9)' =$

(7) $\left(-6x^5 + 5x^3 - x^2\right)' =$

(8) $\left(-2x^6 - 3x^4 + x^2\right)' =$

(9) $\left(-2x^5 - 5x^3 - 6x^2\right)' =$

(10) $\left(-4x^3 - 3x - 2\right)' =$

(11) $\{(3x+1)(-x+2)\}' = (3x+1)'(-x+2) + (3x+1)(-x+2)'$

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

$=$

(12) $\{(x+4)(x+8)\}' =$

(13) $\{(3x-7)(x-2)\}' =$

(14) $\{\left(x^2+x+2\right)(x-10)\}' = \left(x^2+x+2\right)'(x-10) + \left(x^2+x+2\right)(x-10)'$

$= (2x+1) \cdot (x-10) + \left(x^2+x+2\right) \cdot 1$

$=$

(15) $\{\left(x^2+x-1\right)(2x-3)\}' =$

(16) $\{\left(x^2+3x-10\right)(-x-3)\}' =$

3. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(-4x^8)' =$

(2) $(4x^7)' =$

(3) $(2x^2)' =$

(4) $(3)' =$

(5) $(-5x^6)' =$

(6) $(5x^4)' =$

(7) $\left(2x^4 + 5x^2 + x\right)' =$

(8) $\left(-x^5 - 3x^4 + 4x^2\right)' =$

(9) $\left(-6x^3 + 4x^2 + 1\right)' =$

(10) $\left(-3x^4 + x^3 + 5x^2\right)' =$

(11) $\{(3x-2)(-x+3)\}' = (3x-2)'(-x+3) + (3x-2)(-x+3)'$

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

$=$

(12) $\{(x-9)(x-4)\}' =$

(13) $\{(3x-7)(-x-6)\}' =$

(14) $\{\left(x^2+2x-9\right)(x-8)\}' = \left(x^2+2x-9\right)'(x-8) + \left(x^2+2x-9\right)(x-8)'$

$= (2x+2) \cdot (x-8) + \left(x^2+2x-9\right) \cdot 1$

$=$

(15) $\{\left(x^2+3x+10\right)(2x-7)\}' =$

(16) $\{\left(x^2+2x-10\right)(2x+3)\}' =$

4. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(-6x)' =$

(2) $(8x^9)' =$

(3) $(x^3)' =$

(4) $(4x^8)' =$

(5) $(2x^7)' =$

(6) $(-2x^5)' =$

(7) $\left(4x^5 + 5x^3 - 2x\right)' =$

(8) $\left(-3x^4 + x^2 + 6\right)' =$

(9) $\left(5x^3 + 5x^2 - 1\right)' =$

(10) $\left(6x^3 - 4x^2 + 3\right)' =$

(11) $\{(2x+4)(x+2)\}' = (2x+4)'(x+2) + (2x+4)(x+2)'$

$= 2 \cdot (x+2) + (2x+4) \cdot 1$

$=$

(12) $\{(2x-10)(x-1)\}' =$

(13) $\{(2x+1)(-x+2)\}' =$

(14) $\{\left(x^2+2x+2\right)(2x+8)\}' = \left(x^2+2x+2\right)'(2x+8) + \left(x^2+2x+2\right)(2x+8)'$

$= (2x+2) \cdot (2x+8) + \left(x^2+2x+2\right) \cdot 2$

$=$

(15) $\{\left(x^2+x-6\right)(x+4)\}' =$

(16) $\{(x-6)\left(x^2+2x-3\right)\}' =$

5. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(-6x)' =$

(2) $(-5x^2)' =$

(3) $(3x^{10})' =$

(4) $(4x^3)' =$

(5) $(-x^6)' =$

(6) $(6)' =$

(7) $\left(3x^4 + 3x^3 - 5x\right)' =$

(8) $\left(x^4 + 6x^2 + 5\right)' =$

(9) $\left(-3x^2 - 3x + 6\right)' =$

(10) $\left(-x^4 - 6x^3 + 2x^2\right)' =$

(11) $\{(3x+4)(2x+3)\}' = (3x+4)'(2x+3) + (3x+4)(2x+3)'$

$= 3 \cdot (2x+3) + (3x+4) \cdot 2$

$=$

(12) $\{(x-1)(x+9)\}' =$

(13) $\{(3x-1)(x-4)\}' =$

(14) $\{\left(x^2+2x+5\right)(x+1)\}' = \left(x^2+2x+5\right)'(x+1) + \left(x^2+2x+5\right)(x+1)'$

$= (2x+2) \cdot (x+1) + \left(x^2+2x+5\right) \cdot 1$

$=$

(15) $\{\left(x^2+3x-6\right)(-x+2)\}' =$

(16) $\{\left(x^2+3x+10\right)(x-9)\}' =$

6. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(2x^5)' =$

(2) $(-5x^2)' =$

(3) $(3x^7)' =$

(4) $(7x^3)' =$

(5) $(-6x^{10})' =$

(6) $(4x^4)' =$

(7) $\left(-x^2 + x + 5\right)' =$

(8) $\left(-5x^3 + 2x^2 + x\right)' =$

(9) $\left(-2x^4 - x^2 + 1\right)' =$

(10) $\left(x^2 - 2x + 6\right)' =$

(11) $\{(2x+4)(x-8)\}' = (2x+4)'(x-8) + (2x+4)(x-8)'$

$= 2 \cdot (x-8) + (2x+4) \cdot 1$

$=$

(12) $\{(2x+5)(2x+3)\}' =$

(13) $\{(x-5)(2x+1)\}' =$

(14) $\{\left(x^2+x+4\right)(x-8)\}' = \left(x^2+x+4\right)'(x-8) + \left(x^2+x+4\right)(x-8)'$

$= (2x+1) \cdot (x-8) + \left(x^2+x+4\right) \cdot 1$

$=$

(15) $\{\left(x^2+3x-4\right)(2x-9)\}' =$

(16) $\{(x+7)\left(x^2+3x-5\right)\}' =$

7. 微分 1 $(fg)' = f'g + fg'$ まで

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

(2) $(-1)' =$

(3) $(8x^2)' =$

(4) $(x^6)' =$

(5) $(-4x^5)' =$

(6) $(5x^4)' =$

(7) $\left(-x^4 - 6x^2 + 2x\right)' =$

(8) $\left(-4x^3 - x^2 - 3x\right)' =$

(9) $\left(x^4 + 6x^2 - 4\right)' =$

(10) $\left(-6x^4 - x^2 + 5\right)' =$

(11) $\{(x+3)(2x+10)\}' = (x+3)'(2x+10) + (x+3)(2x+10)'$

$= 1 \cdot (2x+10) + (x+3) \cdot 2$

$=$

(12) $\{(3x+4)(x-8)\}' =$

(13) $\{(x-2)(-x+5)\}' =$

(14) $\{\left(x^2+3x-9\right)(-x+4)\}' = \left(x^2+3x-9\right)'(-x+4) + \left(x^2+3x-9\right)(-x+4)'$

$= (2x+3) \cdot (-x+4) + \left(x^2+3x-9\right) \cdot (-1)$

$=$

(15) $\{(x-8)\left(x^2+3x+3\right)\}' =$

(16) $\{(-x+6)\left(x^2+2x-3\right)\}' =$

8. 微分 1 $(fg)' = f'g + fg'$ まで

(1) $(4x)' =$

(2) $(-6x^8)' =$

(3) $(8x^9)' =$

(4) $(7)' =$

(5) $(2x^3)' =$

(6) $(5x^{10})' =$

(7) $\left(x^2 + 4x - 3\right)' =$

(8) $\left(-3x^2 + 4x + 3\right)' =$

(9) $\left(-x^3 + 5x - 5\right)' =$

(10) $\left(-2x^4 + 2x^3 + 3x\right)' =$

(11) $\{(2x + 10)(2x - 5)\}' = (2x + 10)'(2x - 5) + (2x + 10)(2x - 5)'$

$= 2 \cdot (2x - 5) + (2x + 10) \cdot 2$

$=$

(12) $\{(3x + 4)(2x + 5)\}' =$

(13) $\{(3x - 8)(x - 3)\}' =$

(14) $\{\left(x^2 + 2x + 8\right)(-x - 6)\}' = \left(x^2 + 2x + 8\right)'(-x - 6) + \left(x^2 + 2x + 8\right)(-x - 6)'$

$= (2x + 2) \cdot (-x - 6) + \left(x^2 + 2x + 8\right) \cdot (-1)$

$=$

(15) $\{\left(x^2 + 2x + 1\right)(x - 7)\}' =$

(16) $\{(2x - 9)\left(x^2 + 3x - 5\right)\}' =$