2次方程式

■ 次の方程式を解きなさい。

① $4x^2 + 3x = 0$

② $x^2 + x - 12 = 0$

③ $x^2 - 13x - 30 = 0$

④ $x^2 - 36 = 0$

⑤ $x^2 + 6x + 8 = 0$

⑥ $x^2 + 11x - 12 = 0$

⑦ $x^2 + 4x - 32 = 0$

⑧ $9x^2 - 1 = 0$

⑨ $x^2 + 8x + 12 = 0$

⑩ $4x^2 - 12x + 9 = 0$

⑪ $4x^2 + 4x + 1 = 0$

⑫ $x^2 - 6x + 9 = 0$

⑬ $25x^2 - 1 = 0$

⑭ $x^2 + 16x + 64 = 0$

⑮ $5x^2 + 2x = 0$

⑯ $x^2 + 8x + 16 = 0$

⑰ $9x^2 + 12x + 4 = 0$

⑱ $x^2 - 6x + 5 = 0$

⑲ $x^2 - 2x + 1 = 0$

⑳ $x^2 - 12x + 20 = 0$

㉑ $16x^2 - 8x + 1 = 0$

㉒ $x^2 - 13x + 42 = 0$

㉓ $x^2 - 9x = 0$

㉔ $6x^2 - x = 0$

2次方程式

■ 次の方程式を解きなさい。

① $4x^2+3x=0$

$x(4x+3)=0$

$x=0,-\dfrac{3}{4}$

② $x^2+x-12=0$

$(x-3)(x+4)=0$

$x=3,-4$

③ $x^2-13x-30=0$

$(x+2)(x-15)=0$

$x=-2,15$

④ $x^2-36=0$

$(x+6)(x-6)=0$

$x=\pm 6$

⑤ $x^2+6x+8=0$

$(x+2)(x+4)=0$

$x=-2,-4$

⑥ $x^2+11x-12=0$

$(x-1)(x+12)=0$

$x=1,-12$

⑦ $x^2+4x-32=0$

$(x-4)(x+8)=0$

$x=4,-8$

⑧ $9x^2-1=0$

$(3x+1)(3x-1)=0$

$x=\pm\dfrac{1}{3}$

⑨ $x^2+8x+12=0$

$(x+2)(x+6)=0$

$x=-2,-6$

⑩ $4x^2-12x+9=0$

$(2x-3)^2=0$

$x=\dfrac{3}{2}$

⑪ $4x^2+4x+1=0$

$(2x+1)^2=0$

$x=-\dfrac{1}{2}$

⑫ $x^2-6x+9=0$

$(x-3)^2=0$

$x=3$

⑬ $25x^2-1=0$

$(5x+1)(5x-1)=0$

$x=\pm\dfrac{1}{5}$

⑭ $x^2+16x+64=0$

$(x+8)^2=0$

$x=-8$

⑮ $5x^2+2x=0$

$x(5x+2)=0$

$x=0,-\dfrac{2}{5}$

⑯ $x^2+8x+16=0$

$(x+4)^2=0$

$x=-4$

⑰ $9x^2+12x+4=0$

$(3x+2)^2=0$

$x=-\dfrac{2}{3}$

⑱ $x^2-6x+5=0$

$(x-1)(x-5)=0$

$x=1,5$

⑲ $x^2-2x+1=0$

$(x-1)^2=0$

$x=1$

⑳ $x^2-12x+20=0$

$(x-2)(x-10)=0$

$x=2,10$

㉑ $16x^2-8x+1=0$

$(4x-1)^2=0$

$x=\dfrac{1}{4}$

㉒ $x^2-13x+42=0$

$(x-6)(x-7)=0$

$x=6,7$

㉓ $x^2-9x=0$

$x(x-9)=0$

$x=0,9$

㉔ $6x^2-x=0$

$x(6x-1)=0$

$x=0,\dfrac{1}{6}$