

二次方程式 3.

組名

1. 次の方程式を解け.

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

(2)  $(x+3)^2=6$

$$\begin{aligned} (x+4)^2 &= 6 \\ x+4 &= \pm\sqrt{6} \\ x &= -4 \pm\sqrt{6} \end{aligned}$$

(3)  $(x-1)^2=5$

(4)  $(x-9)^2=7$

(5)  $(x-6)^2=3$

(6)  $(x+4)^2=12$

(7)  $(x-5)^2=27$

(8)  $(x+3)^2=45$

2. 次の方程式を解け.

(1)  $(x-2)^2=25$

(2)  $(x+3)^2=49$

$$\begin{aligned} (x+2)^2 &= 36 \\ x+2 &= \pm 6 \\ x &= -2 \pm 6 \\ x &= -2+6, x = -2-6 \\ x &= 4, x = -8 \end{aligned}$$

(3)  $(x-6)^2=1$

(4)  $(x+5)^2=16$

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

(6)  $(x+3)^2=36$

(7)  $(x-1)^2=9$

(8)  $(x+6)^2=36$

3. 次の方程式をとり.

(1)  $(x+2)^2-6=0$

(2)  $(x+3)^2-5=0$

$$\begin{aligned} (x+2)^2 - 6 &= 0 \\ (x+2)^2 &= 6 \\ x+2 &= \pm\sqrt{6} \\ x &= -2 \pm\sqrt{6} \end{aligned}$$

(3)  $(x-1)^2-3=0$

(4)  $(x-8)^2-7=0$

(5)  $(x-\frac{1}{2})^2-2=0$

(6)  $(x+5)^2-27=0$

(7)  $(x-3)^2-20=0$

(8)  $(x+9)^2-98=0$

4. 次の方程式を解け.

(1)  $(x-4)^2-49=0$

(2)  $(x+3)^2-25=0$

$$\begin{aligned} (x-2)^2 - 16 &= 0 \\ (x-2)^2 &= 16 \\ x-2 &= \pm 4 \\ x &= 2 \pm 4 \\ x &= 2+4, x = 2-4 \\ x &= 6, x = -2 \end{aligned}$$

(3)  $(x-2)^2-16=0$

(4)  $(x+5)^2-81=0$

(5)  $(x-1)^2-36=0$

(6)  $(x+3)^2-100=0$

(7)  $(x-6)^2-64=0$

(8)  $(x-7)^2-49=0$