

1 次の方程式を解け。

- (1)  $2^x=64$       (2)  $27^x=\frac{1}{9}$       (3)  $\left(\frac{1}{4}\right)^x=\frac{1}{64}$       (4)  $\left(\frac{1}{8}\right)^x=16$   
(5)  $2^x=64$       (6)  $\left(\frac{1}{2}\right)^x=4$       (7)  $\left(\frac{1}{4}\right)^x=\frac{1}{64}$   
(8)  $7^x=49$       (9)  $4^x=\frac{1}{64}$       (10)  $\left(\frac{1}{3}\right)^x=\frac{1}{81}$   
(11)  $2^x=64$       (12)  $\left(\frac{1}{8}\right)^x=16$       (13)  $3^{3x-4}=243$

2 次の方程式を解け。

- (1)  $2^{3x-2}=128$       (2)  $125^{x-1}=\left(\frac{1}{25}\right)^{x-6}$       (3)  $3^{x-2}=\frac{1}{3\sqrt{3}}$   
(4)  $2^{2x+1}=32$       (5)  $4^{2x-1}=2^{3x-5}$       (6)  $\sqrt{2}\cdot 4^x=8$   
(7)  $5^{3x+1}=\frac{1}{125}$

3 次の方程式を解け。

- (1)  $4^x+2^{x+1}-24=0$       (2)  $10^{2x}+10^x=2$   
(3)  $9^{x+1}-28\cdot 3^x+3=0$       (4)  $(3^x)^2+3^x-12=0$   
(5)  $2^x+16\cdot 2^{-x}-10=0$       (6)  $4^{2x}+4^{x+1}-12=0$   
(7)  $100^x+10^x=2$       (8)  $4^x-10\cdot 2^x+16=0$   
(9)  $4^x-2^{x+1}-8=0$       (10)  $2^{2x+1}-5\cdot 2^x-12=0$