

Ⓐ Solve.

$$(1) \ 2^x + 5 = 9$$

$$(2) \ 3^x + 7 = 34$$

$$(3) \ 6^x + 30 = 66$$

$$(4) \ 25^x + 10 = 135$$

$$(5) \ 4^x + 22 = 54$$

Ⓐ Solve.

$$(6) \ 2 \times 2^x + 3 \times 2^x = 20$$

$$(7) \ 4 \times 3^x + 5 \times 3^x = 243$$

$$(8) \ 3 \times 4^x + 6 \times 4^x = 72$$

$$(9) \ 5 \times 5^x + 2 \times 5^x = 175$$

$$(10) \ 2 \times 3^x + 2 \times 3^x = 36$$

☺ Solve.

$$(11) \ 2 \times 5^{2x-1} + 3 \times 5^{2x-1} = 125$$

$$(12) \ 3 \times 3^{3x+1} + 4 \times 3^{3x+1} = 63$$

$$(13) \ 5 \times 4^{x+3} + 4 \times 4^{x+3} = 72$$

$$(14) \ 7 \times 5^{3x-2} + 4 \times 5^{3x-2} = 55$$

$$(15) \ 6 \times 7^{5x-3} + 2 \times 7^{5x-3} = 56$$

☺ Solve.

$$(16) \ 2^x - 7 = 25$$

$$(17) \ 5^x - 3 = 22$$

$$(18) \ 3 \times 4^x - 15 = 9$$

$$(19) \ 2 \times 3^x - 19 = 35$$

$$(20) \ 5 \times 8^x - 22 = 58$$

☺ *Solve.*

$$(21) \ 5 \times 2^x - 3 \times 2^x = 64$$

$$(22) \ 10 \times 3^x - 2 \times 3^x = 72$$

$$(23) \ 5 \times 4^x - 4 \times 4^x = 32$$

$$(24) \ 7 \times 5^x - 4 \times 5^x = 75$$

$$(25) \ 6 \times 7^x - 2 \times 7^x = 28$$

☺ *Solve.*

$$(26) \ 5 \times 5^{2x-1} - 3 \times 5^{2x-1} = 50$$

$$(27) \ 7 \times 3^{3x+1} - 3 \times 3^{3x+1} = 36$$

$$(28) \ 5 \times 4^{x+3} - 2 \times 4^{x+3} = 48$$

$$(29) \ 6 \times 5^{3x-2} - 2 \times 5^{3x-2} = 100$$

$$(30) \ 8 \times 7^{5x-3} - 6 \times 7^{5x-3} = 98$$

☺ *Solve.*

$$(31) \ (2^x)^2 - 6 \times 2^x + 8 = 0$$

$$(32) \ (3^x)^2 - 10 \times 3^x + 9 = 0$$

$$(33) \ (4^x)^2 - 12 \times 4^x + 32 = 0$$

$$(34) \ 7^x + 49 \times 7^{-x} - 50 = 0$$

$$(35) \ 3^x + 9 \times 3^{-x} = 6$$

☺ *Solve.*

$$(36) \ 4^x - 10 \times 2^x + 16 = 0$$

$$(37) \ 9^x - 12 \times 3^x + 27 = 0$$

$$(38) \ 16^x - 12 \times 4^x + 32 = 0$$

$$(39) \ 25^x - 6 \times 5^x + 5 = 0$$

$$(40) \ 36^x - 42 \times 6^x + 216 = 0$$