

(1) a)  $5 \cdot 10^6$                       b)  $1 \cdot 10^7$                       c)  $1.35 \cdot 10^8$                       d)  $2 \cdot 10^4$

(2) a)  $x = 11$                       b)  $x = 13$                       c)  $x = 22$   
d)  $x = a + 2$

(3) a) 729                                  b)  $-729$                                   c)  $-19683$   
d)  $a^{12}$                                   e)  $a^{12}$                                   f)  $-3^{12}$

(4) a)  $3^{18}$                                   b)  $3^{42}$                                   c)  $2^{-21}$   
d)  $5^{3n}$                                   e)  $3^{6p}$

(5)  $6.3072 \cdot 10^{10} s$