$a)$ $2324.6 = 2324 + 0.6 \rightarrow N = 2324$ y $r = 0.6$

$a)$ $2324.6 = 2324 + 0.6 \rightarrow N = 2324$ y $r = 0.6$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0 :$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0$

$$a) \; 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \; y \; r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:$ $N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \land r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$\quad k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1: \ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2:$

$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162}\ \wedge\ r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581}\ \wedge\ r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290}\ \wedge\ r_2 = 1$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \ \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1: \ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \ \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2: \ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \ \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} \ldots a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1$

$$a) \; 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \; y \; r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0 :$ $N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1 :$ $N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2 :$ $N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3 :$ $N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4 :$ $N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5 :$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1: \ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2: \ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3: \ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4: \ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5: \ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6: \ N_6 = \boxed{36} = 2q_6 + r_6$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

$k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

$k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

$k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

$k = 7:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

$k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

$k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

$k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

$k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:$ $N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:$ $N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:$ $N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:$ $N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:$ $N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:$ $N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:$ $N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:$ $N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

$k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

$k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

$k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

$k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

$k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0 :\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1 :\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2 :\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3 :\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

$k = 4 :\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

$k = 5 :\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

$k = 6 :\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

$k = 7 :\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

$k = 8 :\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0 : \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1 : \ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2 : \ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3 : \ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4 : \ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5 : \ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6 : \ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7 : \ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8 : \ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9 :$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1: \ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2: \ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3: \ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4: \ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5: \ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6: \ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7: \ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8: \ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9: \ N_9 = \boxed{4} = 2q_9 + r_9$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

  $k = 10:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162}\ \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581}\ \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290}\ \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145}\ \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

$k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72}\ \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

$k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36}\ \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

$k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18}\ \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

$k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9}\ \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

$k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4}\ \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

$k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2}\ \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

$k = 10:\ N_{10} = \boxed{2} = 2q_{10} + r_{10}$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0 :\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1 :\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2 :\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3 :\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4 :\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5 :\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6 :\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7 :\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8 :\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9 :\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

  $k = 10 :\ N_{10} = \boxed{2} = 2q_{10} + r_{10} \rightarrow q_{10} = \boxed{1} \wedge r_{10} = 0$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

  $k = 10:\ N_{10} = \boxed{2} = 2q_{10} + r_{10} \rightarrow q_{10} = \boxed{1} \wedge r_{10} = 0 \rightarrow \boxed{a_{10} = 0}$

  $k = 11:$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1}...a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

  $k = 10:\ N_{10} = \boxed{2} = 2q_{10} + r_{10} \rightarrow q_{10} = \boxed{1} \wedge r_{10} = 0 \rightarrow \boxed{a_{10} = 0}$

  $k = 11:\ N_{11} = \boxed{1} = 2q_{11} + r_{11}$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

$k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

$k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

$k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

$k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

$k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

$k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

$k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

$k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

$k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

$k = 10:\ N_{10} = \boxed{2} = 2q_{10} + r_{10} \rightarrow q_{10} = \boxed{1} \wedge r_{10} = 0 \rightarrow \boxed{a_{10} = 0}$

$k = 11:\ N_{11} = \boxed{1} = 2q_{11} + r_{11} \rightarrow q_{11} = \boxed{0} \wedge r_{11} = 1$

$$a) \ 2324.6 = 2324 + 0.6 \rightarrow N = 2324 \ y \ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0: \ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \ \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1: \ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \ \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2: \ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \ \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3: \ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \ \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4: \ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \ \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5: \ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \ \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6: \ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \ \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7: \ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \ \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8: \ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \ \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9: \ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \ \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

  $k = 10: \ N_{10} = \boxed{2} = 2q_{10} + r_{10} \rightarrow q_{10} = \boxed{1} \ \wedge r_{10} = 0 \rightarrow \boxed{a_{10} = 0}$

  $k = 11: \ N_{11} = \boxed{1} = 2q_{11} + r_{11} \rightarrow q_{11} = \boxed{0} \ \wedge r_{11} = 1 \rightarrow \boxed{a_{11} = 1}$

$$a)\ 2324.6 = 2324 + 0.6 \rightarrow N = 2324\ y\ r = 0.6$$

$$N = 2324 = (a_j a_{j-1} ... a_2 a_1 a_0)_2$$

- $k = 0:\ N_0 = 2324 = 2q_0 + r_0 \rightarrow q_0 = \boxed{1162} \wedge r_0 = 0 \rightarrow \boxed{a_0 = 0}$

  $k = 1:\ N_1 = \boxed{1162} = 2q_1 + r_1 \rightarrow q_1 = \boxed{581} \wedge r_1 = 0 \rightarrow \boxed{a_1 = 0}$

  $k = 2:\ N_2 = \boxed{581} = 2q_2 + r_2 \rightarrow q_2 = \boxed{290} \wedge r_2 = 1 \rightarrow \boxed{a_2 = 1}$

  $k = 3:\ N_3 = \boxed{290} = 2q_3 + r_3 \rightarrow q_3 = \boxed{145} \wedge r_3 = 0 \rightarrow \boxed{a_3 = 0}$

  $k = 4:\ N_4 = \boxed{145} = 2q_4 + r_4 \rightarrow q_4 = \boxed{72} \wedge r_4 = 1 \rightarrow \boxed{a_4 = 1}$

  $k = 5:\ N_2 = \boxed{72} = 2q_5 + r_5 \rightarrow q_5 = \boxed{36} \wedge r_5 = 0 \rightarrow \boxed{a_5 = 0}$

  $k = 6:\ N_6 = \boxed{36} = 2q_6 + r_6 \rightarrow q_6 = \boxed{18} \wedge r_6 = 0 \rightarrow \boxed{a_6 = 0}$

  $k = 7:\ N_7 = \boxed{18} = 2q_7 + r_7 \rightarrow q_7 = \boxed{9} \wedge r_7 = 0 \rightarrow \boxed{a_7 = 0}$

  $k = 8:\ N_8 = \boxed{9} = 2q_8 + r_8 \rightarrow q_8 = \boxed{4} \wedge r_8 = 1 \rightarrow \boxed{a_8 = 1}$

  $k = 9:\ N_9 = \boxed{4} = 2q_9 + r_9 \rightarrow q_9 = \boxed{2} \wedge r_9 = 0 \rightarrow \boxed{a_9 = 0}$

  $k = 10:\ N_{10} = \boxed{2} = 2q_{10} + r_{10} \rightarrow q_{10} = \boxed{1} \wedge r_{10} = 0 \rightarrow \boxed{a_{10} = 0}$

  $k = 11:\ N_{11} = \boxed{1} = 2q_{11} + r_{11} \rightarrow q_{11} = \boxed{0} \wedge r_{11} = 1 \rightarrow \boxed{a_{11} = 1}$

$$N = 2324 = 100100010100_{(2)}$$

$$r = 0.6 = (0.d_1d_2...d_j...)_2$$

- $k = 1$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \ \rightarrow \ \boxed{d_1 = 1}$

$$r = 0.6 = (0.d_1d_2...d_j...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$

$$\rightarrow r_2 = 1.2 - 1 = 0.2$$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow$ $\boxed{d_1 = 1}$

$$\rightarrow r_2 = 1.2 - 1 = 0.2$$

- $k = 2$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow$ $\boxed{d_1 = 1}$

$$\rightarrow r_2 = 1.2 - 1 = 0.2$$

- $k = 2$; $2r_2 = 0.4$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$

$\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ $\rightarrow$ $\boxed{d_2 = 0}$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow \boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow \boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow$ $\boxed{d_1 = 1}$

    $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow$ $\boxed{d_2 = 0}$

    $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ → $\boxed{d_1 = 1}$

  → $r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ → $\boxed{d_2 = 0}$

  → $r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ $\rightarrow$ $\boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$ $\rightarrow$ $\boxed{d_3 = 0}$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow \boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow \boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8 \rightarrow \boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

$$r = 0.6 = (0.d_1d_2...d_j...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow$ $\boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow$ $\boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8 \rightarrow$ $\boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ → $\boxed{d_1 = 1}$

  → $r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ → $\boxed{d_2 = 0}$

  → $r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$ → $\boxed{d_3 = 0}$

  → $r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$

    $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ $\rightarrow$ $\boxed{d_2 = 0}$

    $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$ $\rightarrow$ $\boxed{d_3 = 0}$

    $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6$ $\rightarrow$ $\boxed{d_4 = 1}$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow \boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow \boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8 \rightarrow \boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6 \rightarrow \boxed{d_4 = 1}$

  $\rightarrow r_5 = 1.6 - 1 = 0.6$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ $\rightarrow$ $\boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$ $\rightarrow$ $\boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6$ $\rightarrow$ $\boxed{d_4 = 1}$

  $\rightarrow r_5 = 1.6 - 1 = 0.6$

- $k = 5$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow \boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow \boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8 \rightarrow \boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6 \rightarrow \boxed{d_4 = 1}$

  $\rightarrow r_5 = 1.6 - 1 = 0.6$

- $k = 5$; $2r_5 = 1.2$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$
    $$\rightarrow r_2 = 1.2 - 1 = 0.2$$
- $k = 2$; $2r_2 = 0.4$ $\rightarrow$ $\boxed{d_2 = 0}$
    $$\rightarrow r_3 = 0.4 - 0 = 0.4$$
- $k = 3$; $2r_3 = 0.8$ $\rightarrow$ $\boxed{d_3 = 0}$
    $$\rightarrow r_4 = 0.8 - 0 = 0.8$$
- $k = 4$; $2r_4 = 1.6$ $\rightarrow$ $\boxed{d_4 = 1}$
    $$\rightarrow r_5 = 1.6 - 1 = 0.6$$
- $k = 5$; $2r_5 = 1.2$ $\rightarrow$ $\boxed{d_5 = 1}$

$$r = 0.6 = (0.d_1d_2...d_j...)_2$$

- $k = 1$; $2r_1 = 1.2$ $\rightarrow$ $\boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ $\rightarrow$ $\boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$ $\rightarrow$ $\boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6$ $\rightarrow$ $\boxed{d_4 = 1}$

  $\rightarrow r_5 = 1.6 - 1 = 0.6$

- $k = 5$; $2r_5 = 1.2$ $\rightarrow$ $\boxed{d_5 = 1}$

  $\rightarrow r_6 = 1.2 - 1 = \boxed{0.2}$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2$ → $\boxed{d_1 = 1}$

  → $r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4$ → $\boxed{d_2 = 0}$

  → $r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8$ → $\boxed{d_3 = 0}$

  → $r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6$ → $\boxed{d_4 = 1}$

  → $r_5 = 1.6 - 1 = 0.6$

- $k = 5$; $2r_5 = 1.2$ → $\boxed{d_5 = 1}$

  → $r_6 = 1.2 - 1 = \boxed{0.2}$

$$\boxed{r = 0.6 = (0.1001100110011...)_2 = (0.1\overline{0011})_2}$$

$$r = 0.6 = (0.d_1 d_2 ... d_j ...)_2$$

- $k = 1$; $2r_1 = 1.2 \rightarrow \boxed{d_1 = 1}$

  $\rightarrow r_2 = 1.2 - 1 = 0.2$

- $k = 2$; $2r_2 = 0.4 \rightarrow \boxed{d_2 = 0}$

  $\rightarrow r_3 = 0.4 - 0 = 0.4$

- $k = 3$; $2r_3 = 0.8 \rightarrow \boxed{d_3 = 0}$

  $\rightarrow r_4 = 0.8 - 0 = 0.8$

- $k = 4$; $2r_4 = 1.6 \rightarrow \boxed{d_4 = 1}$

  $\rightarrow r_5 = 1.6 - 1 = 0.6$

- $k = 5$; $2r_5 = 1.2 \rightarrow \boxed{d_5 = 1}$

  $\rightarrow r_6 = 1.2 - 1 = \boxed{0.2}$

$$\boxed{r = 0.6 = (0.1001100110011...)_2 = (0.1\overline{0011})_2}$$

$\therefore 2324, 6 = 2324 + 0.6 = 100100010100_{(2)} + 0.1\overline{0011}_{(2)} = \textcolor{red}{100100010100.1\overline{0011}_{(2)}}$

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	
N_k	
a_k	

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	
N_k	
a_k	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	
N_k	
a_k	

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0
N_k	
a_k	

$$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0
N_k	3475
a_k	

$$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0
N_k	3475
a_k	1

$$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0	1
N_k	3475	
a_k	1	

$$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0	1
N_k	3475	1737
a_k	1	

$$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0	1
N_k	3475	1737
a_k	1	1

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2
N_k	3475	1737	
a_k	1	1	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475\ \ y\ \ r = 0.52$

k	0	1	2
N_k	3475	1737	868
a_k	1	1	

$$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0	1	2
N_k	3475	1737	868
a_k	1	1	0

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475$ y $r = 0.52$

k	0	1	2	3
N_k	3475	1737	868	
a_k	1	1	0	

$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3
N_k	3475	1737	868	434
a_k	1	1	0	

$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3
N_k	3475	1737	868	434
a_k	1	1	0	0

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4
N_k	3475	1737	868	434	
a_k	1	1	0	0	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4
N_k	3475	1737	868	434	217
a_k	1	1	0	0	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4
N_k	3475	1737	868	434	217
a_k	1	1	0	0	1

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5
N_k	3475	1737	868	434	217	
a_k	1	1	0	0	1	

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5
N_k	3475	1737	868	434	217	108
a_k	1	1	0	0	1	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5
N_k	3475	1737	868	434	217	108
a_k	1	1	0	0	1	0

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6
N_k	3475	1737	868	434	217	108	
a_k	1	1	0	0	1	0	

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475$ y $r = 0.52$

k	0	1	2	3	4	5	6
N_k	3475	1737	868	434	217	108	54
a_k	1	1	0	0	1	0	

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6
N_k	3475	1737	868	434	217	108	54
a_k	1	1	0	0	1	0	0

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475\ \ y\ \ r = 0.52$

k	0	1	2	3	4	5	6	7
N_k	3475	1737	868	434	217	108	54	
a_k	1	1	0	0	1	0	0	

$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7
N_k	3475	1737	868	434	217	108	54	27
a_k	1	1	0	0	1	0	0	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7
N_k	3475	1737	868	434	217	108	54	27
a_k	1	1	0	0	1	0	0	1

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8
N_k	3475	1737	868	434	217	108	54	27	
a_k	1	1	0	0	1	0	0	1	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475\ \ y\ \ r = 0.52$

k	0	1	2	3	4	5	6	7	8
N_k	3475	1737	868	434	217	108	54	27	13
a_k	1	1	0	0	1	0	0	1	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8
N_k	3475	1737	868	434	217	108	54	27	13
a_k	1	1	0	0	1	0	0	1	1

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475$ y $r = 0.52$

k	0	1	2	3	4	5	6	7	8	9
N_k	3475	1737	868	434	217	108	54	27	13	
a_k	1	1	0	0	1	0	0	1	1	

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \;\; y \;\; r = 0.52$

k	0	1	2	3	4	5	6	7	8	9
N_k	3475	1737	868	434	217	108	54	27	13	6
a_k	1	1	0	0	1	0	0	1	1	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8	9
N_k	3475	1737	868	434	217	108	54	27	13	6
a_k	1	1	0	0	1	0	0	1	1	0

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8	9	10
N_k	3475	1737	868	434	217	108	54	27	13	6	
a_k	1	1	0	0	1	0	0	1	1	0	

$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \ \ y \ \ r = 0.52$

k	0	1	2	3	4	5	6	7	8	9	10
N_k	3475	1737	868	434	217	108	54	27	13	6	3
a_k	1	1	0	0	1	0	0	1	1	0	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8	9	10
N_k	3475	1737	868	434	217	108	54	27	13	6	3
a_k	1	1	0	0	1	0	0	1	1	0	1

$$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$$

k	0	1	2	3	4	5	6	7	8	9	10	11
N_k	3475	1737	868	434	217	108	54	27	13	6	3	
a_k	1	1	0	0	1	0	0	1	1	0	1	

$$b) \ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \ \ y \ \ r = 0.52$$

k	0	1	2	3	4	5	6	7	8	9	10	11
N_k	3475	1737	868	434	217	108	54	27	13	6	3	1
a_k	1	1	0	0	1	0	0	1	1	0	1	

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8	9	10	11
N_k	3475	1737	868	434	217	108	54	27	13	6	3	1
a_k	1	1	0	0	1	0	0	1	1	0	1	1
												←

$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8	9	10	11
N_k	3475	1737	868	434	217	108	54	27	13	6	3	1
a_k	1	1	0	0	1	0	0	1	1	0	1	1
												←

$$N = 3475 = 110110010011_{(2)}$$

b) $3475.52 = 3475 + 0.52 \rightarrow N = 3475 \quad y \quad r = 0.52$

k	0	1	2	3	4	5	6	7	8	9	10	11
N_k	3475	1737	868	434	217	108	54	27	13	6	3	1
a_k	1	1	0	0	1	0	0	1	1	0	1	1
												$\leftarrow$

$$N = 3475 = 110110010011_{(2)}$$

$$Para \quad r = 0.52$$

$$b)\ 3475.52 = 3475 + 0.52 \rightarrow N = 3475\ \ y\ \ r = 0.52$$

k	0	1	2	3	4	5	6	7	8	9	10	11
N_k	3475	1737	868	434	217	108	54	27	13	6	3	1
a_k	1	1	0	0	1	0	0	1	1	0	1	1
												$\leftarrow$

$$N = 3475 = 110110010011_{(2)}$$

$$Para\ \ r = 0.52$$

- $k = 1\ ;\ 2r_1 = 1.04\ \rightarrow\ \boxed{d_1 = 1}\ \wedge r_2 = 0.04$

  $k = 2\ ;\ 2r_2 = 0.08\ \rightarrow\ \boxed{d_2 = 0}\ \wedge r_3 = 0.08$

  $k = 3\ ;\ 2r_3 = 0.16\ \rightarrow\ \boxed{d_3 = 0}\ \wedge r_4 = 0.16$

  $k = 4\ ;\ 2r_4 = 0.32\ \rightarrow\ \boxed{d_4 = 0}\ \wedge r_5 = 0.32$

  $k = 5\ ;\ 2r_5 = 0.64\ \rightarrow\ \boxed{d_5 = 0}\ \wedge r_6 = 0.64$

  $k = 6\ ;\ 2r_6 = 1.28\ \rightarrow\ \boxed{d_6 = 1}\ \wedge r_7 = 0.28$

- $k = 7$; $2r_7 = 0.56$ $\rightarrow$ $\boxed{d_7 = 0}$ $\wedge r_8 = 0.56$

  $k = 8$; $2r_8 = 1.12$ $\rightarrow$ $\boxed{d_8 = 1}$ $\wedge r_9 = 0.12$

  $k = 9$; $2r_9 = 0.24$ $\rightarrow$ $\boxed{d_9 = 0}$ $\wedge r_{10} = 0.24$

  $k = 10$; $2r_{10} = 0.48$ $\rightarrow$ $\boxed{d_{10} = 0}$ $\wedge r_{11} = 0.48$

  $k = 11$; $2r_{11} = 0.96$ $\rightarrow$ $\boxed{d_{11} = 0}$ $\wedge r_{12} = 0.96$

  $k = 12$; $2r_{12} = 1.92$ $\rightarrow$ $\boxed{d_{12} = 1}$ $\wedge r_{13} = 0.92$

  $k = 13$; $2r_{13} = 1.84$ $\rightarrow$ $\boxed{d_{13} = 1}$ $\wedge r_{14} = 0.84$

  $k = 14$; $2r_{14} = 1.68$ $\rightarrow$ $\boxed{d_{14} = 1}$ $\wedge r_{15} = 0.68$

  $k = 15$; $2r_{15} = 1.36$ $\rightarrow$ $\boxed{d_{15} = 1}$ $\wedge r_{16} = 0.36$

  $k = 16$; $2r_{16} = 0.72$ $\rightarrow$ $\boxed{d_{16} = 0}$ $\wedge r_{17} = 0.72$

  $k = 17$; $2r_{17} = 1.44$ $\rightarrow$ $\boxed{d_{17} = 1}$ $\wedge r_{18} = 0.44$

  $k = 18$; $2r_{18} = 0.88$ $\rightarrow$ $\boxed{d_{18} = 0}$ $\wedge r_{19} = 0.88$

  $k = 19$; $2r_{19} = 1.76$ $\rightarrow$ $\boxed{d_{19} = 1}$ $\wedge r_{20} = 0.76$

  $k = 20$; $2r_{20} = 1.52$ $\rightarrow$ $\boxed{d_{20} = 1}$ $\wedge r_{21} = 0.52$

  $k = 21$; $2r_{21} = 1.04$ $\rightarrow$ $\boxed{d_{21} = 1}$ $\wedge r_{22} = 0.04$

$$r = 0.52 = (0.100001010001111010111100001....)_2 = (0.1\overline{00001010001111010111})_2$$

$$\therefore 3475.52 = 3475 + 0.52 = 110110010011_{(2)} + 0.1\overline{00001010001111010111}_{(2)}$$

$$= 110110010011.1\overline{00001010001111010111}_{(2)}$$