Dati i seguenti $x_0 \in \mathbf{R}$, $\delta > 0$, $A \subset \mathbf{R}$, determinare l'insieme $(]x_0 - \delta, x_0 + \delta[\setminus\{x_0\}) \cap A$

Risposta:

$x_0 = 2$, $\quad \delta = 3$, $\quad A = [-3, 0[$ $\hspace{6cm}$ $]-1, 0[$

$x_0 = 3$, $\quad \delta = 2$, $\quad A = [2, 3]$ $\hspace{6cm}$ $[2, 3[$

$x_0 = 5$, $\quad \delta = 4$, $\quad A = [4, 7]$ $\hspace{5cm}$ $[4, 7] \setminus \{5\} = [4, 5[\cup]5, 7]$

$x_0 = 6$, $\quad \delta = 3$, $\quad A = [6, 10]$ $\hspace{6cm}$ $]6, 9[$

$x_0 = 4$, $\quad \delta = 2$, $\quad A =]5, 7]$ $\hspace{6cm}$ $]5, 6[$

$x_0 = 8$, $\quad \delta = 2$, $\quad A =]3, 6]$ $\hspace{6cm}$ $\emptyset$

$x_0 = 1$, $\quad \delta = 4$, $\quad A = [-3, 1]$ $\hspace{6cm}$ $]-3, 1[$

$x_0 = 7$, $\quad \delta = 3$, $\quad A =]4, 8[$ $\hspace{5cm}$ $]4, 8[\setminus\{7\} =]4, 7[\cup]7, 8[$

$x_0 = 9$, $\quad \delta = 6$, $\quad A =]5, 16]$ $\hspace{4.5cm}$ $]5, 15[\setminus\{9\} =]5, 9[\cup]9, 15[$

$x_0 = 2$, $\quad \delta = 4$, $\quad A = [3, 6]$ $\hspace{6cm}$ $[3, 6[$

$x_0 = 3$, $\quad \delta = 5$, $\quad A = [8, 9[$ $\hspace{6cm}$ $\emptyset$

$x_0 = 5$, $\quad \delta = 2$, $\quad A =]1, 4[$ $\hspace{6cm}$ $]3, 4[$

$x_0 = 6$, $\quad \delta = 5$, $\quad A = [1, 6]$ $\hspace{6cm}$ $]1, 6[$

$x_0 = 4$, $\quad \delta = 3$, $\quad A = [0, 8[$ $\hspace{5cm}$ $]1, 7[\setminus\{4\} =]1, 4[\cup]4, 7[$

$x_0 = 8$, $\quad \delta = 4$, $\quad A =]8, 9[$ $\hspace{6cm}$ $]8, 9[$

$x_0 = 1$, $\quad \delta = 3$, $\quad A = [2, 5[$ $\hspace{6cm}$ $[2, 4[$

$x_0 = 7$, $\quad \delta = 2$, $\quad A = [9, 10]$ $\hspace{6cm}$ $\emptyset$

$x_0 = 9$, $\quad \delta = 4$, $\quad A = [4, 5]$ $\hspace{6cm}$ $\emptyset$

$x_0 = 2$, $\quad \delta = 5$, $\quad A =]0, 2[$ $\hspace{6cm}$ $]0, 2[$

$x_0 = 3$, $\quad \delta = 4$, $\quad A =]-1, 7[$ $\hspace{4.5cm}$ $]-1, 7[\setminus\{3\} =]-1, 3[\cup]3, 7[$

$x_0 = 5$, $\quad \delta = 3$, $\quad A = [6, 9]$ $\hspace{6cm}$ $[6, 8[$

$x_0 = 6$, $\quad \delta = 4$, $\quad A =]9, 10[$ $\hspace{6cm}$ $]9, 10[$

$x_0 = 4$, $\quad \delta = 4$, $\quad A =]9, 10[$ $\hspace{6cm}$ $\emptyset$