Determinare il dominio naturale (contenuto in $\mathbf{R}$) della seguente corrispondenza:

$x \to \sqrt{1 + x - \frac{5x}{3} + 2 - \frac{x}{2}}$ Risposta: $\left]-\infty, \frac{18}{7}\right]$

$x \to \frac{\arccos(1 - 5^x)}{x + 2}$ Risposta: $]-\infty, \log_5 2] \setminus \{-2\}$

$x \to \sqrt{\frac{2x}{3} - 3 + x - 1 - \frac{x}{2}}$ Risposta: $\left[\frac{24}{7}, +\infty\right[$

$x \to \frac{\operatorname{arcsen}(1 - 4^x)}{x + 3}$ Risposta: $]-\infty, \log_4 2] \setminus \{-3\} = \left]-\infty, \frac{1}{2}\right] \setminus \{-3\}$

$x \to \log_{\frac{5}{2}} \left(-x^2 - 7x - 12\right)$ Risposta: $]-4, -3[$

$x \to \frac{\operatorname{arcsen}(6^x - 1)}{x + 5}$ Risposta: $]-\infty, \log_6 2] \setminus \{-5\}$

$x \to \log_{\frac{1}{5}} \left(x^2 + 7x + 12\right)$ Risposta: $]-\infty, -4[\cup]-3, +\infty[$

$x \to \log_{\frac{9}{2}} \left(x^2 - x - 12\right)$ Risposta: $]-\infty, -3[\cup]4, +\infty[$

$x \to \sqrt{\frac{5x}{2} - 2 + \frac{x}{3} - 1 - x}$ Risposta: $\left[\frac{18}{11}, +\infty\right[$

$x \to \log_{\frac{1}{2}} \left(-x^2 + 7x - 12\right)$ Risposta: $]3, 4[$

$x \to \sqrt{\frac{2x}{3} - 1 + 3x - 4 + \frac{x}{2}}$ Risposta: $\left[\frac{6}{5}, +\infty\right[$

$x \to \frac{\operatorname{arcsen}(2^x - 1)}{x + 1}$ Risposta: $]-\infty, 1] \setminus \{-1\}$

$x \to \log_{\frac{7}{2}} \left(x^2 - x - 12\right)$ Risposta: $]-\infty, -3[\cup]4, +\infty[$

$x \to \log_{\frac{1}{5}} \left(x^2 - 2x - 15\right)$ Risposta: $]-\infty, -3[\cup]5, +\infty[$

$x \to \sqrt{\frac{2x}{3} + 2 - \frac{x}{2} + 1 + \frac{x}{3}}$ Risposta: $[-6, +\infty[$

$x \to \frac{\operatorname{arcsen}(8^x - 1)}{x + 3}$ Risposta: $]-\infty, \log_8 2] \setminus \{-3\} = \left]-\infty, \frac{1}{3}\right] \setminus \{-3\}$

$x \to \log_{\frac{1}{8}} \left(x^2 - 9x + 18\right)$ Risposta: $]-\infty, 3[\cup]6, +\infty[$

$x \to \sqrt{\frac{x}{2} - 1 + 2x - 1 + \frac{x}{3}}$ Risposta: $\left[\frac{12}{17}, +\infty\right[$

$x \to \frac{\arccos(3^x - 1)}{x + 2}$ Risposta: $]-\infty, \log_3 2] \setminus \{-2\}$

$x \to \log_{\frac{1}{5}} \left(x^2 + x - 12\right)$ Risposta: $]-\infty, -4[\cup]3, +\infty[$

$x \to \sqrt{\dfrac{5x}{2} - 1 + \dfrac{x}{3} - 1 - 3x}$ Risposta: $\left]-\infty, -12\right]$

$x \to \dfrac{\arccos(7^x - 1)}{x+4}$ Risposta: $\left]-\infty, \log_7 2\right] \setminus \{-4\}$

$x \to \log_{\frac{1}{6}} \left(-x^2 + 8x - 15\right)$ Risposta: $]3, 5[$

$x \to \sqrt{2 + 3x - \dfrac{5x}{3} + 2 - \dfrac{2x}{5}}$ Risposta: $\left[-\dfrac{30}{7}, +\infty\right[$

$x \to \dfrac{\arccos(2^x - 1)}{x+7}$ Risposta: $\left]-\infty, 1\right] \setminus \{-7\}$

$x \to \log_7 \left(-x^2 + 2x + 15\right)$ Risposta: $] - 3, 5[$

$x \to \sqrt{2x + \dfrac{1}{3} - \dfrac{5x}{2} - 1 - \dfrac{2x}{3}}$ Risposta: $\left]-\infty, -\dfrac{4}{7}\right]$

$x \to \dfrac{\operatorname{arcsen}(1 - 6^x)}{x+1}$ Risposta: $\left]-\infty, \log_6 2\right] \setminus \{-1\}$

$x \to \log_{\frac{1}{2}} \left(x^2 + 2x - 15\right)$ Risposta: $] - \infty, -5[\cup]3, +\infty[$

$x \to \sqrt{x + \dfrac{1}{3} - \dfrac{5x}{2} + 1 - \dfrac{2x}{3}}$ Risposta: $\left]-\infty, \dfrac{8}{13}\right]$

$x \to \dfrac{\arccos(1 - 4^x)}{x+6}$ Risposta: $\left]-\infty, \log_4 2\right] \setminus \{-6\} = \left]-\infty, \dfrac{1}{2}\right] \setminus \{-6\}$

$x \to \dfrac{\operatorname{arcsen}(1 - 8^x)}{x+3}$ Risposta: $\left]-\infty, \log_8 2\right] \setminus \{-3\} = \left]-\infty, \dfrac{1}{3}\right] \setminus \{-3\}$

$x \to \log_{\frac{1}{7}} \left(x^2 + x - 12\right)$ Risposta: $] - \infty, -4[\cup]3, +\infty[$

$x \to \sqrt{x + \dfrac{1}{3} - \dfrac{x}{3} + 1 - \dfrac{2x}{3}}$ Risposta: $\mathbf{R}$

$x \to \dfrac{\arccos(3^x - 1)}{x+8}$ Risposta: $\left]-\infty, \log_3 2\right] \setminus \{-8\}$

$x \to \log_{\frac{3}{2}} \left(-x^2 - 8x - 15\right)$ Risposta: $] - 5, -3[$

$x \to \sqrt{\dfrac{x}{2} + \dfrac{4}{3} - \dfrac{x}{3} + 1 - \dfrac{2x}{3}}$ Risposta: $\left]-\infty, \dfrac{14}{3}\right]$

$x \to \dfrac{\operatorname{arcsen}(1 - 7^x)}{x+2}$ Risposta: $\left]-\infty, \log_7 2\right] \setminus \{-2\}$

$x \to \log_{\frac{5}{2}} \left(x^2 - 9x + 18\right)$ Risposta: $] - \infty, 3[\cup]6, +\infty[$

$x \to \sqrt{\dfrac{2x}{3} - 2 - \dfrac{x}{2} + 1 + \dfrac{2x}{3}}$ Risposta: $\left[\dfrac{6}{5}, +\infty\right[$

$x \to \sqrt{\dfrac{5x}{2} + 1 + \dfrac{3x}{4} - 3x - 2}$ Risposta: $[4, +\infty[$

$x \to \dfrac{\operatorname{arcsen}(1-9^x)}{x+2}$ Risposta: $]-\infty, \log_9 2] \setminus \{-2\}$

$x \to \log_{\frac{5}{2}}\left(x^2-8x+15\right)$ Risposta: $]-\infty, 3[\cup]5, +\infty[$

$x \to \sqrt{\dfrac{2x}{3}+1+\dfrac{x}{4}-x-\dfrac{1}{2}}$ Risposta: $]-\infty, 6]$

$x \to \dfrac{\operatorname{arcsen}(3^x-1)}{x+3}$ Risposta: $]-\infty, \log_3 2] \setminus \{-3\}$

$x \to \log_{\frac{1}{2}}\left(x^2+9x+18\right)$ Risposta: $]-\infty, -6[\cup]-3, +\infty[$

$x \to \sqrt{x+\dfrac{1}{3}-\dfrac{3x}{2}-1-\dfrac{x}{4}}$ Risposta: $\left]-\infty, -\dfrac{8}{9}\right]$

$x \to \log_{\frac{1}{7}}\left(x^2+8x+15\right)$ Risposta: $]-\infty, -5[\cup]-3, +\infty[$

$x \to \sqrt{2x+\dfrac{1}{3}-\dfrac{x}{2}+1-\dfrac{2x}{3}}$ Risposta: $\left[-\dfrac{8}{5}, +\infty\right[$

$x \to \dfrac{\operatorname{arcsen}(5^x-1)}{x+4}$ Risposta: $]-\infty, \log_5 2] \setminus \{-4\}$

$x \to \log_{\frac{1}{3}}\left(x^2+3x-18\right)$ Risposta: $]-\infty, -6[\cup]3, +\infty[$

$x \to \dfrac{\arccos(1-6^x)}{x+9}$ Risposta: $]-\infty, \log_6 2] \setminus \{-9\}$

$x \to \sqrt{1-\dfrac{x}{2}-\dfrac{3x}{4}-2+\dfrac{2x}{3}}$ Risposta: $\left]-\infty, -\dfrac{12}{7}\right]$

$x \to \dfrac{\arccos(9^x-1)}{x+6}$ Risposta: $]-\infty, \log_9 2] \setminus \{-6\}$

$x \to \log_{\frac{9}{2}}\left(-x^2+3x+18\right)$ Risposta: $]-3, 6[$

$x \to \sqrt{\dfrac{x}{4}+2-\dfrac{2x}{3}-1+\dfrac{x}{3}}$ Risposta: $]-\infty, 12]$

$x \to \dfrac{\operatorname{arcsen}(1-4^x)}{x+8}$ Risposta: $]-\infty, \log_4 2] \setminus \{-8\} = \left]-\infty, \dfrac{1}{2}\right] \setminus \{-8\}$