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## Problem 6

The denominator must never vanish. So we find where  $1 - \tan x = 0$ . This occurs when  $1 = \tan x$ , which is equivalent to  $x = \pi/4 + k\pi$  where k is any integer. Also, the domain of the tan function is  $(-\infty, \infty) \setminus \{\pi/2 + k\pi : k \in \mathbb{Z}\}$ . So  $\mathrm{Dom}(f) = (-\infty, \infty) \setminus \{\pi/4 + k\pi, \pi/2 + k\pi : k \in \mathbb{Z}\}$ .