## SOME DEs TO SOLVE

You know how to solve first-order *separable* (section 2.2) and *linear* (section 2.3) DEs. Decide if these are separable or linear (or both or neither), and find the general solution if possible.

**1.** $\dfrac{dy}{dx} = 1 + x^2$

**2.** $\dfrac{dy}{dx} = 1 + y^2$

**3.** $\dfrac{dy}{dx} = 1 + y$

**4.** $\dfrac{dy}{dx} = 1 + xy$

**5.** $\dfrac{dy}{dx} = 1 + xy^2$

**6.** $\dfrac{dy}{dx} = x + xy$