Worksheet 1 / 10 points

Name: .

Match the following solutions to their DEs:

a. $y = \dfrac{a}{x-1} + \sin(x)$

b. $y = ae^{2x} + b + x^2$

c. $y = a\sin x + bx$

d. $y = a\sqrt{x+1} + \dfrac{1}{x}$

e. $y = ae^{x} + x^2$

f. $y = -1/3x\ln x + ax^2$

g. $y^4 + y\sqrt{x+1} - 2 = 0$

h. $xy^2 + e^y = 0$

1. $x(y-2)y' - y = 0$

2. $y' = \dfrac{-y^3}{2(3y^4-2)(y^4-2)}$

3. $y''(\cot(x)x - 1) + xy' - y = 0$

4. $xy' - 2y - \dfrac{x}{3}(\ln(x) - 1) = 0$

5. $(2x+2)y' - y + \dfrac{3x+2}{x^2} = 0$

6. $y' - y = x(2-x)$

7. $y' = \dfrac{y - \sin x}{1-x} + \cos x$

8. $y'' = 2y' - 4x + 2$