Attendance Quiz 7

Name:_____ Date:_____

1. Solve the given differential equation. If an initial condition is given, also find the solution that satisfies it.

(a) $\frac{dy}{dx} = \frac{2x+y}{3+3y^2-x}, \qquad y(0)=0$

(b) $(x+e^y)dy - dx = 0$

(c) $(3y^2+2xy)dx - (2xy+x^2)dy = 0$

(d) $x\frac{dy}{dx} + y - y^3x^3 = 0$

(e) $2\sin y\cos x dx + \cos y \sin x dy = 0$

(f) $\frac{dy}{dx} = -\frac{3x^2y+y^2}{2x^3+3xy}, \qquad y(1)=-2$