

1. (a)  $q = 30e^{-0.4t}$

(b)  $w = 0.3z^2 + 40$

(c)  $y = \left(\frac{t + 2\sqrt{10}}{2}\right)^2$

(d)  $y = 2t^3 + 5t + 8$

(e)  $y = \sqrt[3]{x^2 - 5x + 8}$

(f)  $y = \sqrt[3]{t^2 + 125}$