

7. [12 points] Solve each of the equations below. *Show your work step-by-step and write the solutions in **exact form** in the answer blanks provided.*

a. [3 points]  $5(1.7)^{2y} = 2.4$

**Answer:**  $y =$  \_\_\_\_\_

b. [3 points]  $3t - 1 = \log(2(10)^{4.6t})$

**Answer:**  $t =$  \_\_\_\_\_

c. [3 points]  $e^{\ln(w-4)} = \ln(3.2) - \ln(4)$

**Answer:**  $w =$  \_\_\_\_\_

d. [3 points]  $\log(2p + 1) - \log(p - 3) = 3$

**Answer:**  $p =$  \_\_\_\_\_