Logarithms; simple equations

logs on one side, number on the other side.   Use the definition:
$$\log_b n = x \quad \text{iff} \quad b^x = n$$

Example $\log_4 (x-2) = 3$

$4^3 = x - 2$
$64 = x - 2$
$66 = x$

Solve for x.

1. $\log_3 81 = x$

2. $\log_4 x = \dfrac{1}{2}$

3. $\log_2 32 = x$

4. $\log_4 x = 2$

5. $\log_5 125 = x$

6. $\log_2 x = -3$

7. $\log_{25} 5 = x$

8. $\log_x 32 = 5$

9. $\log x = 3$

10. $\log_x 10 = \dfrac{1}{2}$