

Logs and Exponentials LE2

Write each equation in logarithmic form:

$$1. \ 2^x = 32$$

$$2. \ 81 = 3^x$$

$$3. \ 4^x = y$$

$$4. \ 25 = 2^y$$

$$5. \ y = 10^x$$

$$6. \ 3 = e^y$$

Write each equation in exponential form:

$$7. \ 6 = \log_2 x$$

$$8. \ x = \log_3 3$$

$$9. \ x = \log_5 16$$

$$10. \ \log_4 x = 6$$

$$11. \ \log_{10} 5 = y$$

$$12. \ 3 = \log_2 8$$

Solve for x:

$$13. \ x = 2^3$$

$$14. \ 16 = 2^x$$

$$15. \ \log_2 x = 4$$

$$16. \ \log_2 2^5 = x$$

$$17. \ \log_2 4 = x$$

$$18. \ \log_2 \frac{1}{8} = x$$

$$19. \ \log_x 4 = 2$$

$$20. \ \log_x 4 = \frac{1}{2}$$