

(1-4) Rewrite the equation in exponential form.

1) $\log_4 16 = 2$

2) $\log_7 343 = 3$

3) $\log_6 \frac{1}{36} = -2$

4) $\log_{64} 1 = 0$

(5—10) Evaluate the logarithm without using a calculator.

5) $\log_{15} 15$

6) $\log_6 216$

7) $\log_9 1$

8) $\log_3 \frac{1}{27}$

9) $\log_{\frac{1}{4}} 16$

10) $\log_5 625$

(11-14) Use a calculator to evaluate the logarithm.

11) $\log 14$

12) $\ln 0.43$

13) $\log 27$

14) $\log 0.746$

(15-18) Simplify the expression.

15) $7^{\log_7 x}$

16) $30^{\log_{30} 4}$

17) $\log_6 36^x$

18) $\log_5 125^x$

19) MULTIPLE CHOICE Which expression is equivalent to $\log 100^x$?A. x B. $2x$ C. $10x$ D. $100x$

(20-23) Find the inverse of the function.

20) $y = 7^x$

21) $y = \log_{\frac{1}{2}} x$

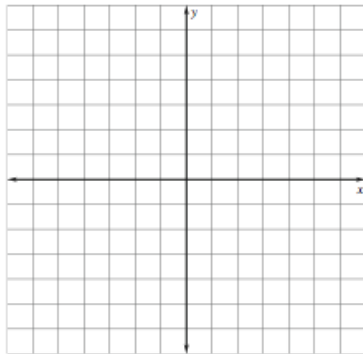
22) $y = 2^x - 3$

23) $y = 6 + \log x$

(24-27) Graph the function. State the domain and range.

24) $y = \log_6 x$

x	y

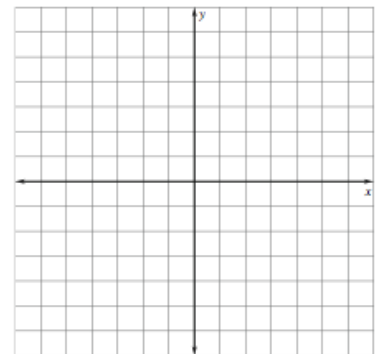


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25) $y = \log_{\frac{1}{5}} x$

x	y

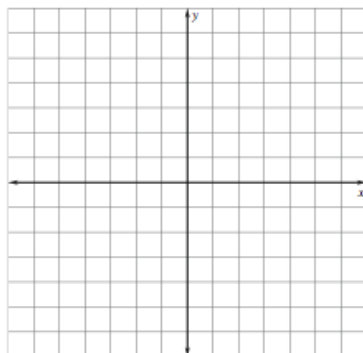


D: _____

R: _____

26) $y = \log_3 x + 4$

x	y

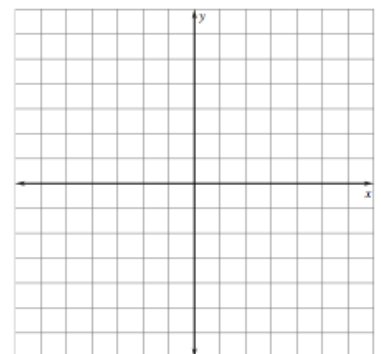


D: _____

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27) $g(x) = \log_6(x - 4) + 2$

x	y



D: _____

R: _____

