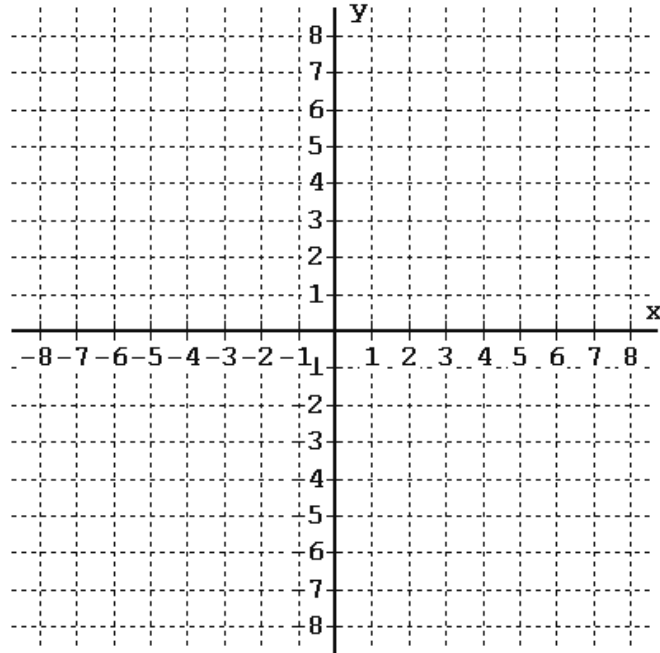


Exponentials and Logarithms

1. Graph the following equations: $y = 3^x$, $y = 3^{-x}$, $y = -3^x$, $y = -3^{-x}$.



2. Evaluate:

a. $\log_3 243 =$

b. $\log_7 \frac{1}{343} =$

3. Solve $\log 2x + \log 3x = \log 12$.

4. Solve:

a. $7^{n+10} - 2 = 15$

b. $3 \cdot 8^{5m} = 24$

c. $2e^{3m-5} - 7 = 42$