

## Activity 0223

Date \_\_\_\_\_ Period \_\_\_\_\_

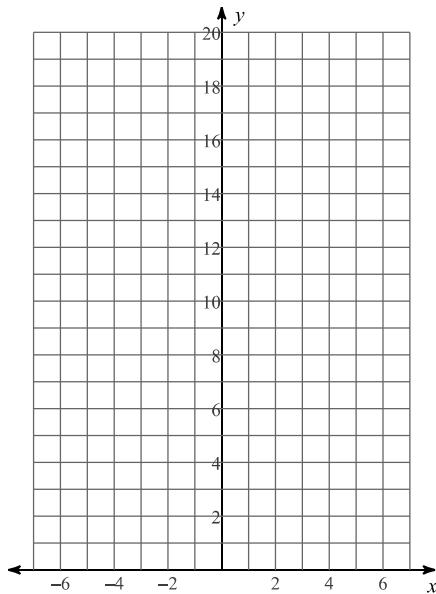
**Identify the domain and range of each.**

1)  $y = \log_5(4x + 17) - 2$

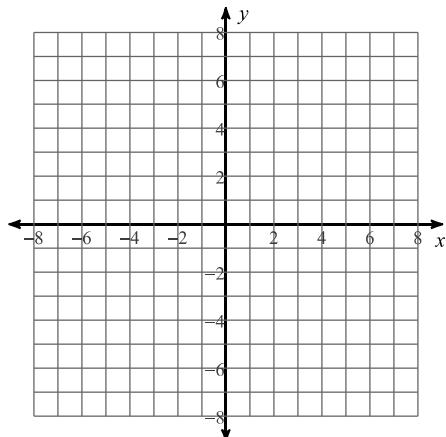
2)  $y = \log_4(2x - 1)$

**Identify the domain and range of each. Then sketch the graph.**

3)  $y = \frac{1}{3} \cdot 2^x$



4)  $y = \ln(x + 1) + 4$

**Evaluate each expression.**

5)  $\log_7 343$

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

**Use a calculator to approximate each to the nearest thousandth.**

7)  $\log_4 -3.9$

8)  $\log_7 1$

9)  $\log_4 27$

10)  $\log_7 3.5$

11)  $\log_3 13$

12)  $\log_2 62$