Practice worksheet | Exponentials and logarithms

Transformations and asymptotes of exponential graphs

Name: _____ Date: _____

6 questions | 13 marks

1. Find the domain and range of $y = 2^x + 3$. [2 marks]

2. Find the y-intercept of $y = 4(3^{x-1}) - 2$. [2 marks]

3. Describe the transformations from $y = 3^x$ to $y = -2(3^{x+1}) + 4$. [2 marks]

4. Find the asymptote and range of $y = 6 - 4(0.8)^x$. [2 marks]

5. Find the x-intercept of $y = 2^{x+1} - 8$. [2 marks]

6. Explain why $y = 2^x + 1$ is not the same graph as $y = 2^{x+1}$. [3 marks]