Logarithm Exercises

1. Solve for z:

$$2^{3z} = 20. (1)$$

2. Let the mongoose population be given by:

$$P(t) = 1234(2.5)^t . (2)$$

At what t does the mongoose population equal 10,000?

- 3. Sketch $f(x) = \log x$ and $g(x) = 10^x$. How are the two graphs related?
- 4. Solve for z:

$$2^z = z + 4$$
. (3)