1. $y = -3$

2. $(-\infty, 4]$

3. $W = \dfrac{6}{5}t + 3$

4. $f(x) = \begin{cases} x + 3 & \text{if } x < 0 \\ \sqrt{x} & \text{if } x \geq 0 \end{cases}$

5. 360

6. $9x - 4$

7. $f^{-1}(x) = \dfrac{3x + 2}{4}$

8. (0,1)

9. 8.6 billion

10. $\log_3\left(\dfrac{1}{81}\right) = -4$

11. $x = -2$

12. 4.9%

13. All of the statements are true.

14. $\log_b\left(\dfrac{xy^2}{\sqrt[3]{z}}\right)$

15. $x = \dfrac{\log 11}{2\log 5}$