1. Consider the following function.

\[
f(x) = \begin{cases} 
  x^3 + 27, & x \leq -3 \\
  x + 3, & -3 < x < 1 \\
  \frac{2 - \sqrt{1 - x}}{2}, & -3 < x < 1 \\
  -1, & x = 1 \\
  x^2 + 2x - 1, & 1 < x 
\end{cases}
\]

(a) Find all points where \( f \) is discontinuous. Be sure to give a full justification here.
(b) For each $x$-value you found in part (a), determine what value should be assigned to $f$, if any, to guarantee that $f$ will be continuous there. Justify your answer.

(For example, if you claim $f$ is discontinuous at $x = a$, then you should determine the value that should be assigned to $f(a)$, if any, to guarantee that $f$ will be continuous at $x = a$.)

2. Find all real solutions to the following equation.

$$\log_2(x) + \log_2(x - 3) = 2$$