Problem 1 *Solve for x in the following logarithmic equation:*

$$\log_2(-3x+5) = 3$$

$x = \boxed{-1}$.

Feedback(attempt): *Start by rewriting the log into an exponential form (i.e. put each side of the equal sign as an exponent to a base which is the same value as the log's base). For example, start by rewriting $\log_2(-3x+5) = 3$ as $-3x+5 = 2^3$, then proceed to solve x.*

Problem 2 *Solve for x in the following logarithmic equation:*

$$\log_5(-x+5) = -4$$

$x = \boxed{\frac{3124}{625}}$.

Feedback(attempt): *Start by rewriting the log into an exponential form (i.e. put each side of the equal sign as an exponent to a base which is the same value as the log's base). For example, start by rewriting $\log_5(-x+5) = -4$ as $-x+5 = 5^{-4}$, then proceed to solve x.*

Problem 3 *Solve for x in the following logarithmic equation:*

$$\log_7(x-4) = -1$$

$x = \boxed{\frac{29}{7}}$.

Feedback(attempt): *Start by rewriting the log into an exponential form (i.e. put each side of the equal sign as an exponent to a base which is the same value as the log's base). For example, start by rewriting $\log_7(x-4) = -1$ as $x-4 = 7^{-1}$, then proceed to solve x.*

Problem 4 *Solve for x in the following logarithmic equation:*

$$\log_4(2x-3) = -1$$

$x = \boxed{\frac{13}{8}}$.

Feedback(*`attempt`*): *Start by rewriting the log into an exponential form (i.e. put each side of the equal sign as an exponent to a base which is the same value as the log's base). For example, start by rewriting* $\log_4(2x-3) = -1$ *as* $2x-3 = 4^{-1}$*, then proceed to solve* x*.*