$\qquad$ Date $\qquad$

## System Solutions

(1) Decide whether each system has exactly one solution, infinitely many solutions, or no solutions.

$$
\left\{\begin{array}{l}
y=\frac{2}{3} x+1 \\
y=\frac{2}{3} x+2
\end{array}\right\}\left\{\begin{array}{l}
d=100-4 t \\
d=3.5+t
\end{array}\right\}\left\{\begin{array}{l}
\frac{1}{8} Q+\frac{3}{8} R=-1 \\
Q+3 R=-8
\end{array}\right\}
$$

(2) For one system, justify your decision to your classmates in two ways:
(a) drawing graphs of solutions;
(b) algebraically.

