\[
\frac{dx}{dt} = 9 - 4x^2
\]

Maple solution:

\[
x(t) = \frac{3}{2} \left( \frac{e^{12t}}{e^{12t} - 1} \right)
\]

Slope field and solution graphs.
2.1.5

$\text{deqtn}:=\text{diff}(x(t),t)=3x(t)*(5-x(t))$:  #5 section 2.1
\text{dsolve}((\text{deqtn},x(0)=8),x(t))$:  #Maple solution
\text{DEplot}((\text{deqtn},x(t),t=-1..1,[[x(0)=0],[x(0)=5],
[x(0)=8],[x(0)=2],[x(0)=3],[x(0)=4],
[x(0)=-1]),x=-3..8,arrows=\text{line},
\text{color}=\text{black},\text{linecolor}=\text{black},\text{dirgrid}=\text{[30,30]}),\text{stepsize}=.05,
\text{title}=\text{`slope field and solution graphs'});

\begin{align*}
x(t) &= \frac{5}{1 - \frac{3}{8} e^{-15t}} \\
\end{align*}

slope field and solution graphs