- Sketch the direction field and some integral curves of
  \[ y' = \frac{1}{2}y + 3. \]

- Sketch the direction field and some integral curves of
  \[ y' = y - y^2. \]
• Sketch the direction field and some integral curves of

\[ y' = t - y^2. \]

• Sketch the direction field and some integral curves of

\[ y' = -\frac{t}{y}. \]