

$$\frac{dy}{dx} = x - y$$

DE1

$$\frac{dy}{dx} = \frac{x}{y}$$

DE2

$$\frac{dy}{dx} = y - x$$

DE3

$$\frac{dy}{dx} = -\frac{x}{y}$$

DE4

$$\frac{dy}{dx} = x$$

DE5

$$\frac{dy}{dx} = -\frac{y}{x}$$

DE6

$$\frac{dy}{dx} = \frac{y}{2}$$

DE7

$$\frac{dy}{dx} = 0.25y(4 - y)$$

DE8

$$\frac{dy}{dx} = 2 - y$$

DE9

$$\frac{dy}{dx} = x + y$$

DE10

Solution curves are circles.

C1

The solution curve that passes through the point $(0, -1)$ is the line $y = x - 1$.

C2

Solution curves are hyperbolas.

C3

The solution curve that passes through the point $(-1, 0)$ is the line $y = -x - 1$.

C4

The solution curve that passes through the point $(1, 1)$ has a local maximum at $(1, 1)$.

C5

Solution curves have horizontal asymptotes only at $y = 0$ and have no vertical asymptotes.

C6

For $0 < y < 4$, solution curves are logistic and have two horizontal asymptotes.

C7

$$\lim_{x \rightarrow \infty} y = 2$$

C8

Solution curves have a vertical asymptote at $x = 0$. If $y > 0$, solution curves are concave up. If $y < 0$, solution curves are concave down.

C9

Solution curves are parabolas.

C10