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> restart;
> with(DEtools);
> de1 := diff(x(t), t) = x(t)^2;
> dsolve(de1);
> dsolve({de1, x(0) = x0});
> DEplot(de1, [x], t = -20 .. 2, [[0, 1], [0, 2]], x = -10 .. 10);
> zoom(%, -20 .. 0, 0 .. .1);
> pensys := {diff(x(t), t) = y(t), diff(y(t), t) = -sin(x(t))};
> dsolve(pensys);
> DEplot(pensys, [x, y], t = 0 .. 10, [[0, 0, .5], [0, 0, 1], [0, 0, 1.5], [0, 0, 1.9], [0, 0, 2.5]], x = -10 .. 10, y = -3 .. 3, arrows = smalltwo);
> zoom(%, -1 .. 1, -1 .. 1);
> DEplot(pensys, [x, y], t = 0 .. 10, [[0, 0, .5], [0, 0, 1], [0, 0, 1.5], [0, 0, 1.9], [0, 0, 2.5]], x = -10 .. 10, y = -3 .. 3, scene = [t, y]);
> SprottB := {diff(x(t), t) = y(t)*z(t), diff(y(t), t) = x(t)-y(t), diff(z(t), t) = 1-
x(t)*y(t)};
> DEplot3d(SprottB, [x, y, z], t = 0 .. 200, [[0, 0, 1, 1]], x = -5 .. 8, y = -3 .. 4, z =
-8 .. 7, stepsize = .1);
> DEplot(SprottB, [x, y, z], t = 0 .. 200, [[0, 0, 1, 1]], x = -5 .. 8, y = -3 .. 4, z = -8 ..
7, stepsize = .1, scene = [t, y]);

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