restart; with(DEtools):

deq := \frac{d}{dx} y(x) = \frac{2x - y(x)^3}{3xy(x)^2};

DEplot(deq, y(x), x=0..4, y=0..4, [[2,1],[1,3]]);

F := (x, y) \rightarrow \frac{2x - y^3}{3xy^2};

h := .2;

xs[0] := 2; ys[0] := 1;

for i from 1 to 10 do
    xs[i] := xs[i-1] + h;
    ys[i] := ys[i-1] + F(xs[i-1], ys[i-1]) * h;
end do;

xs[1] := 2.2;
ys[1] := 1.100000000;
xs[2] := 2.4;
xs[3] := 2.6;
xs[4] := 2.8;
\[ \text{init} := y(2) = 1; \]

\[ \text{sol} := \text{dsolve} \{ \text{deq}, \text{init} \}, y(x) \}; \]

\[ \text{plot}(\text{rhs(sol)}, x=0..4, y=0..4); \]

\[ \text{subs}(x=4, \text{rhs(sol)}); \text{evalf}(\%); \]

\[ \frac{224}{4}^{(1/3)} = 1.518294486 \]

The Euler approximation 1.533 is bigger than the exact value 1.518 because the solution is concave down so the tangent lines are always above the curve.