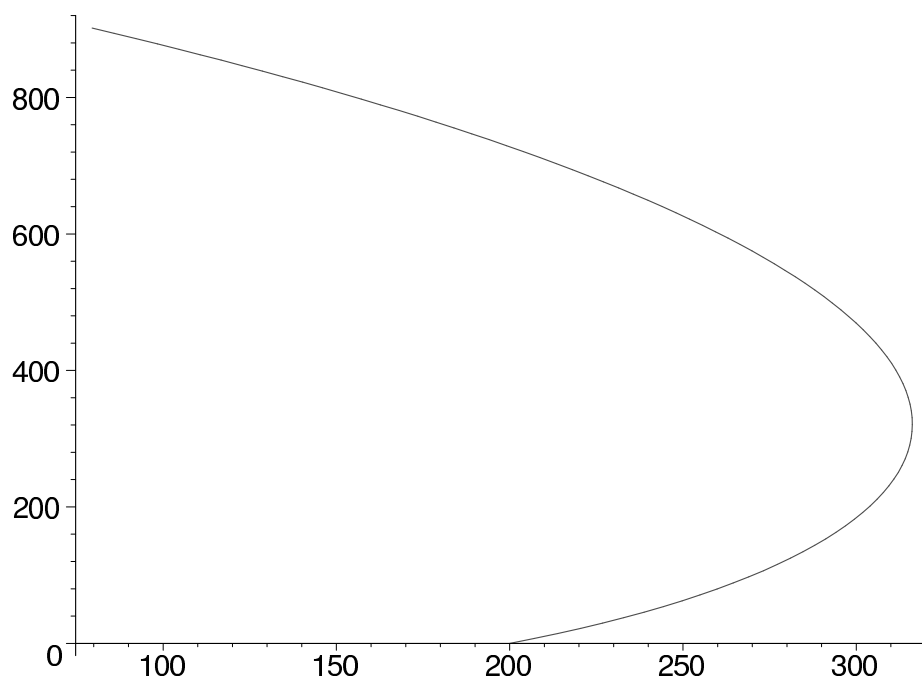


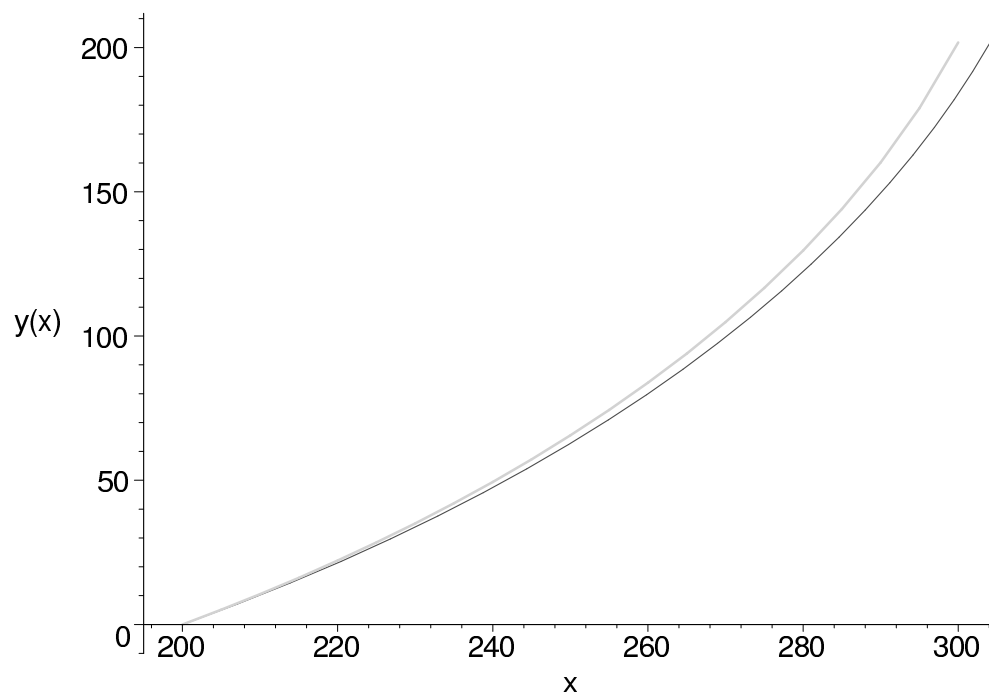
```

[ > restart;
[ >
[ > pfad:=proc(n,h)
[ > local pos,k;
[ > #deklaration der Variablen
[ > pos:=array(1..n);
[ > #Liste anlegen
[ > pos[1]:=[200,0];
[ > #Startwert ablegen
[ > for k from 1 to n-1 do
[ > #Schleife von 1 bis n-1, wobei k der Zaehler ist.
[ > pos[k+1]:=pos[k]+evalf((h/sqrt(2*(pos[k][1]^2+pos[k][2]^2)))*[po
[ > s[k][1]-pos[k][2],pos[k][1]+pos[k][2]]);
[ > #naechster Wert speichern,
[ > end do;
[ > #Ende Schleife
[ > pos;
[ > #Variable ausgeben
[ > end;
pfad:=proc(n,h)
local pos,k;
    pos:=array(1..n);
    pos[1]:=[200,0];
    for k to n-1 do pos[k+1]:=pos[k]+evalf(
        h*[pos[k][1]-pos[k][2],pos[k][1]+pos[k][2]]/sqrt(2*pos[k][1]^2+2*pos[k][2]^2))
    end do;
    pos
end proc
[ > #Funktion beenden
[ > pos:=pfad(100,10);
[
[ > pos:=pos
[ > #Position aufrufen (100 Werte berechnen, Schrittweite 10)
[ > plot(pos);

```



```
[ > with(DEtools):with(plots):
[ > #Dgl- und Plotfunktionen einbinden
[ > display([phaseportrait(diff(y(x),x)=(x+y(x))/(x-y(x)), [y(x)], x=200..300, [[y(200)=0]], arrows=NONE), plot(pos)]);
```



```
[ >
[ > #gelb=Dgl, rot=unser Programm
[ >
```