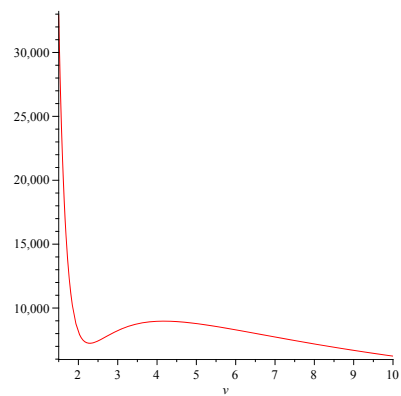


```

> with(plots):
[animate, animate3d, animatecurve, arrow, changecoords, complexplot, complexplot3d,
conformal, conformal3d, contourplot, contourplot3d, coordplot, coordplot3d, densityplot,
display, fieldplot, fieldplot3d, gradplot, gradplot3d, graphplot3d, implicitplot,
implicitplot3d, inequal, interactive, interactiveparams, intersectplot, listcomplot,
listcomplot3d, listdensityplot, listplot, listplot3d, loglogplot, logplot, matrixplot, multiple,
odeplot, pareto, plotcompare, pointplot, pointplot3d, polarplot, polygonplot, polygonplot3d,
polyhedra_supported, polyhedraplot, rootlocus, semilogplot, setcolors, setoptions,
setoptions3d, spacecurve, sparsematrixplot, surfdata, textplot, textplot3d, tubeplot]
> b:=1;
b = 1
(1)
(2)
> a:=300000;
a = 300000
(3)
> p:=(v,t)->(8314*t/(v-b))-a/v^2;
p := (v, t) -> (8314*t / (v-b)) - a/v^2
(4)
> H:=plot(p(v,10),v=1.5..10);
H := PLOT(...)
(5)
> display({H});

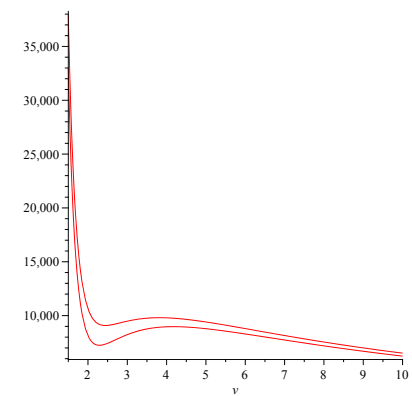
```



```

> J:=plot(p(v,10.3),v=1.5..10);
J := PLOT(...)
(6)
> display({H,J});

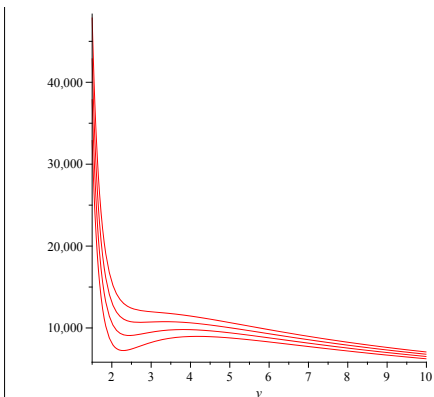
```



```

> K:=plot(p(v,10.6),v=1.5..10);
K := PLOT(...)
(7)
> L:=plot(p(v,10.9),v=1.5..10);
L := PLOT(...)
(8)
> display({H,J,K,L});

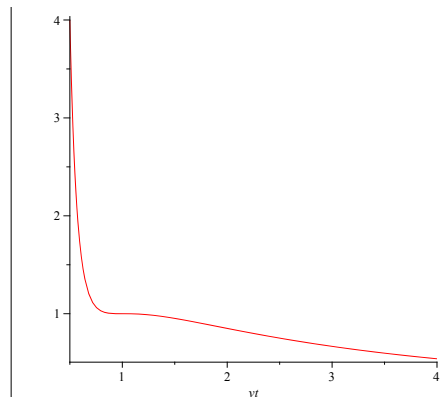
```



```

> pt:=(vt,tt)->(8*tt/(3*vt-1))-3/vt^2;
pt := (vt, tt) -> (8*tt / (3*vt-1)) - 3/vt^2
(9)
> Ht:=plot(pt(vt,1),vt=0.5..4);
Ht := PLOT(...)
(10)
> display({Ht});

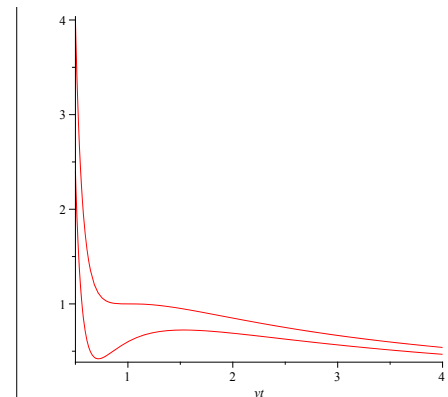
```



```

> Jt:=plot(pt(vt,0.9),vt=0.5..4);
Jt := PLOT(...)
(11)
> display({Ht,Jt});

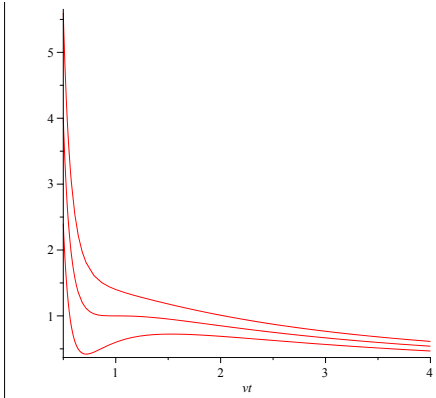
```



```

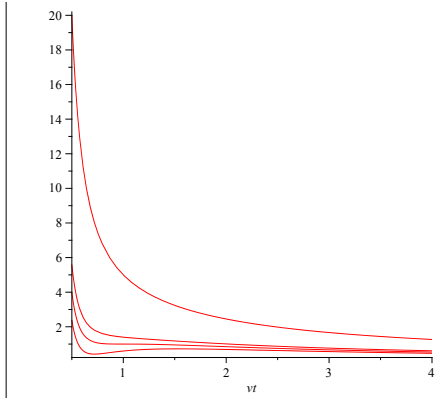
> Kt:=plot(pt(vt,1.1),vt=0.5..4);
Kt := PLOT(...)
(12)
> display({Ht,Jt,Kt});

```



```
> Lt:=plot(pt(vt,2),vt=0.5..4);
      Lt:=PLOT(...)
> display({Ht,Jt,Kt,Lt});
```

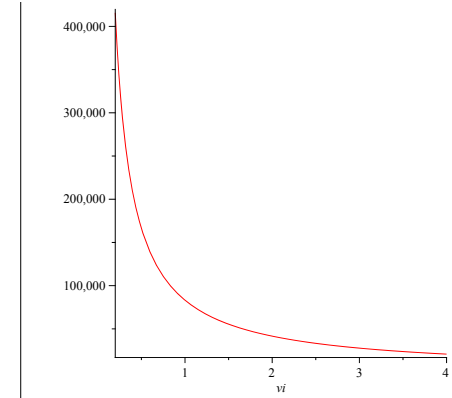
(13)



```
> pideal:=(vi,ti)->8314*ti/vi;
      pideal:=(vi,ti)->8314 ti
      vi
> Hi:=plot(pideal(vi,10),vi=0.2..4);
      Hi:=PLOT(...)
> display({Hi});
```

(14)

(15)



```
>
```