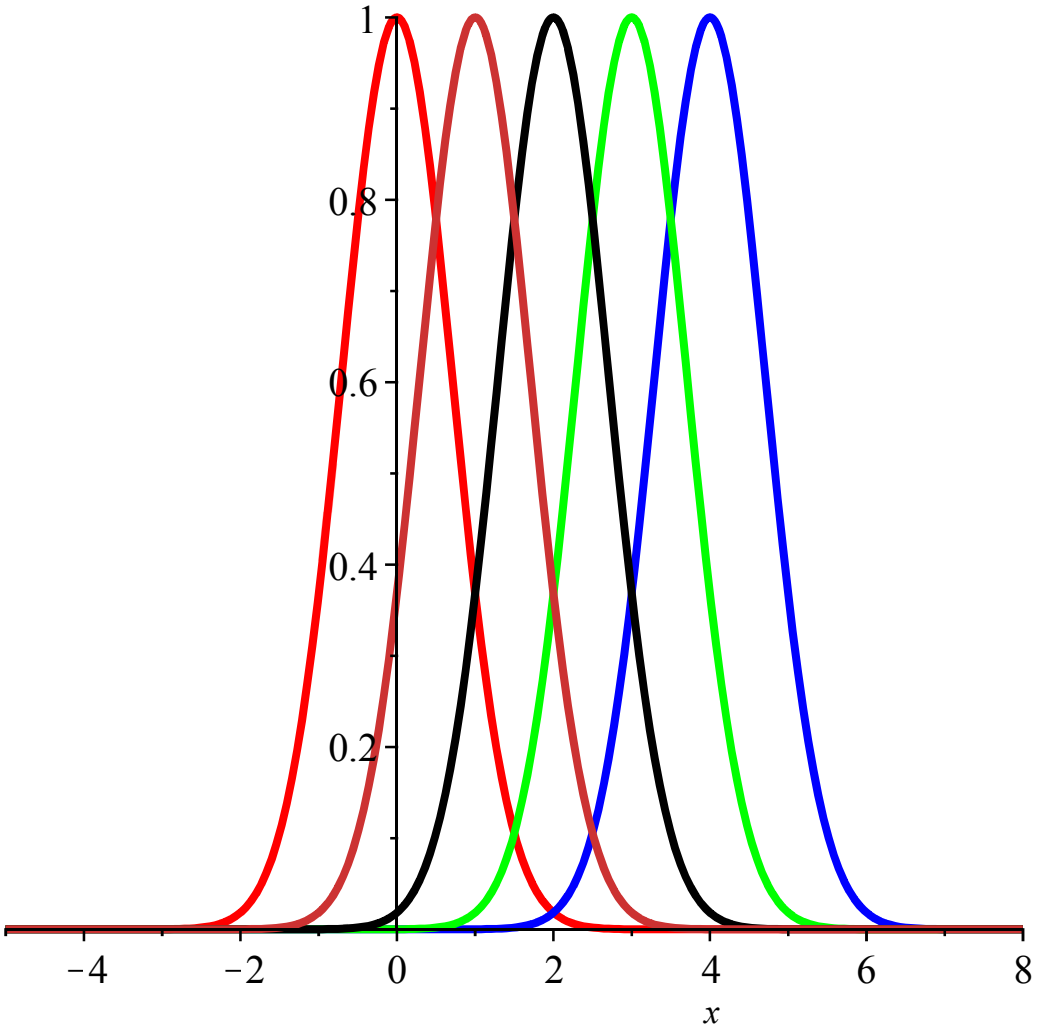
```
> restart;
> with(plots);
```

[animate, animate3d, animatecurve, arrow, changecoords, complexplot, complexplot3d, conformal, conformal3d, contourplot, contourplot3d, coordplot, coordplot3d, densityplot, display, dualaxisplot, fieldplot, fieldplot3d, gradplot, gradplot3d, implicitplot, implicitplot3d, inequal, interactive, interactiveparams, intersectplot, listcontplot, listcontplot3d, listdensityplot, listplot, listplot3d, loglogplot, logplot, matrixplot, multiple, odeplot, pareto, plotcompare, pointplot, pointplot3d, polarplot, polygonplot, polygonplot3d, polyhedra_supported, polyhedraplot, rootlocus, semilogplot, setcolors, setoptions, setoptions3d, shadebetween, spacecurve, sparsematrixplot, surfdata, textplot, textplot3d, tubeplot] **(1)**

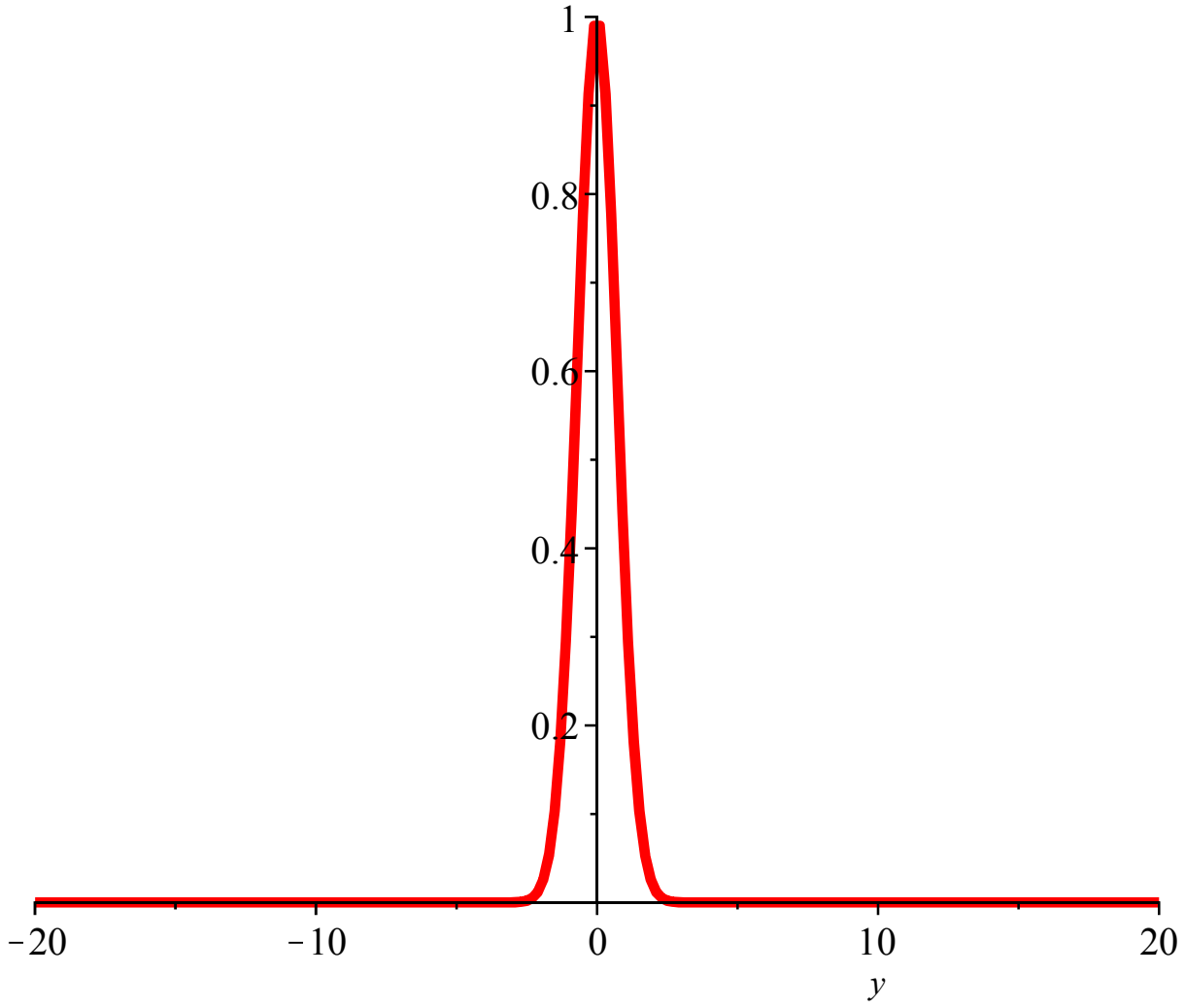
```
>
> f := w -> exp(-w^2);
```

$$f := w \to e^{-w^2} \quad \textbf{(2)}$$

```
> plot({f(x), f(x-1), f(x-2), f(x-3), f(x-4)}, x=-5..8, thickness=3, color=[red, blue, green, black, orange]);
```




```
> animate( ( f(y − t), y = −20 ..20), t = 0 ..20, numpoints = 200, thickness = 4 );
```



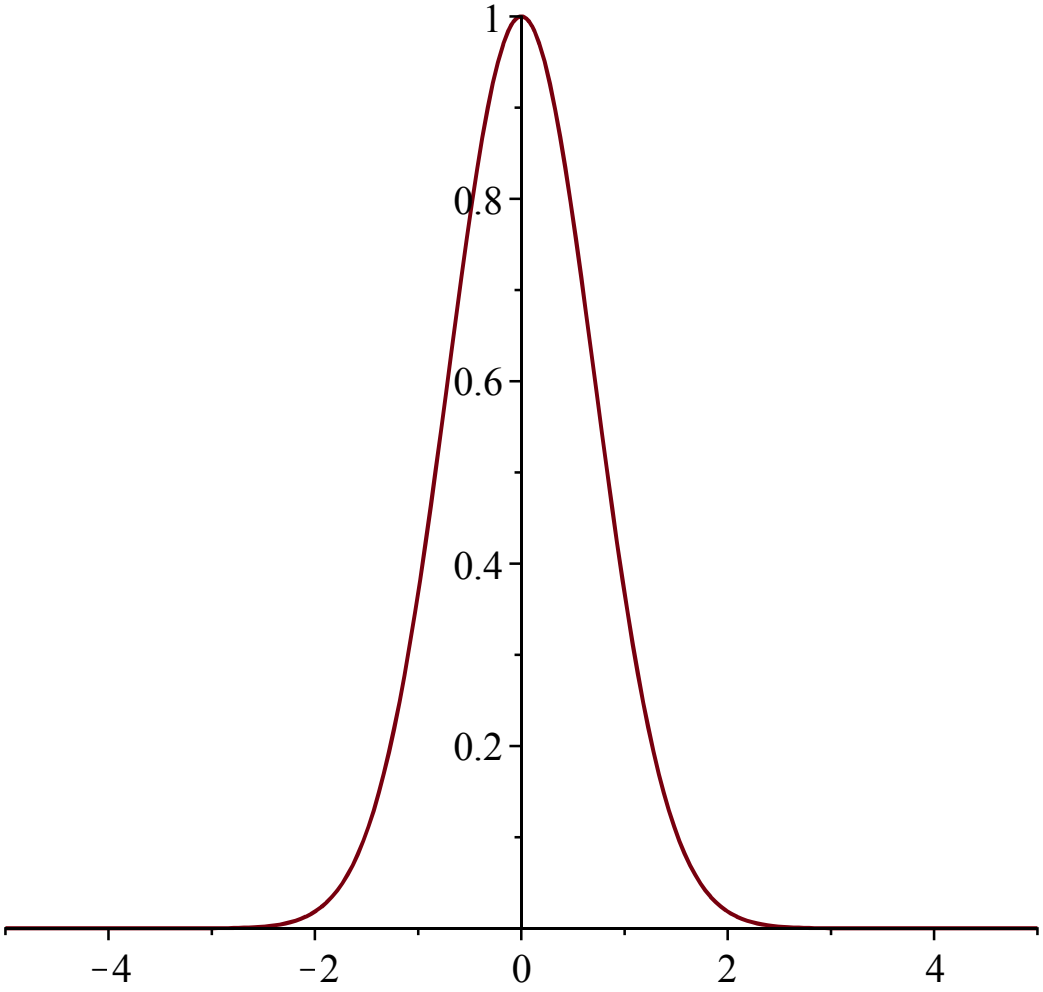
> $u := (w, g) \to \frac{(g+1)}{(g-1)} \cdot (1 + f(w))^{\frac{(g-1)}{2}} - \frac{2}{(g-1)};$

$$u := (w, g) \to \frac{(g+1)\,(1+f(w))^{\frac{1}{2}g-\frac{1}{2}}}{g-1} - \frac{2}{g-1} \tag{3}$$

> $x := (w, t, g) \to w + u(w, g) \cdot t;$

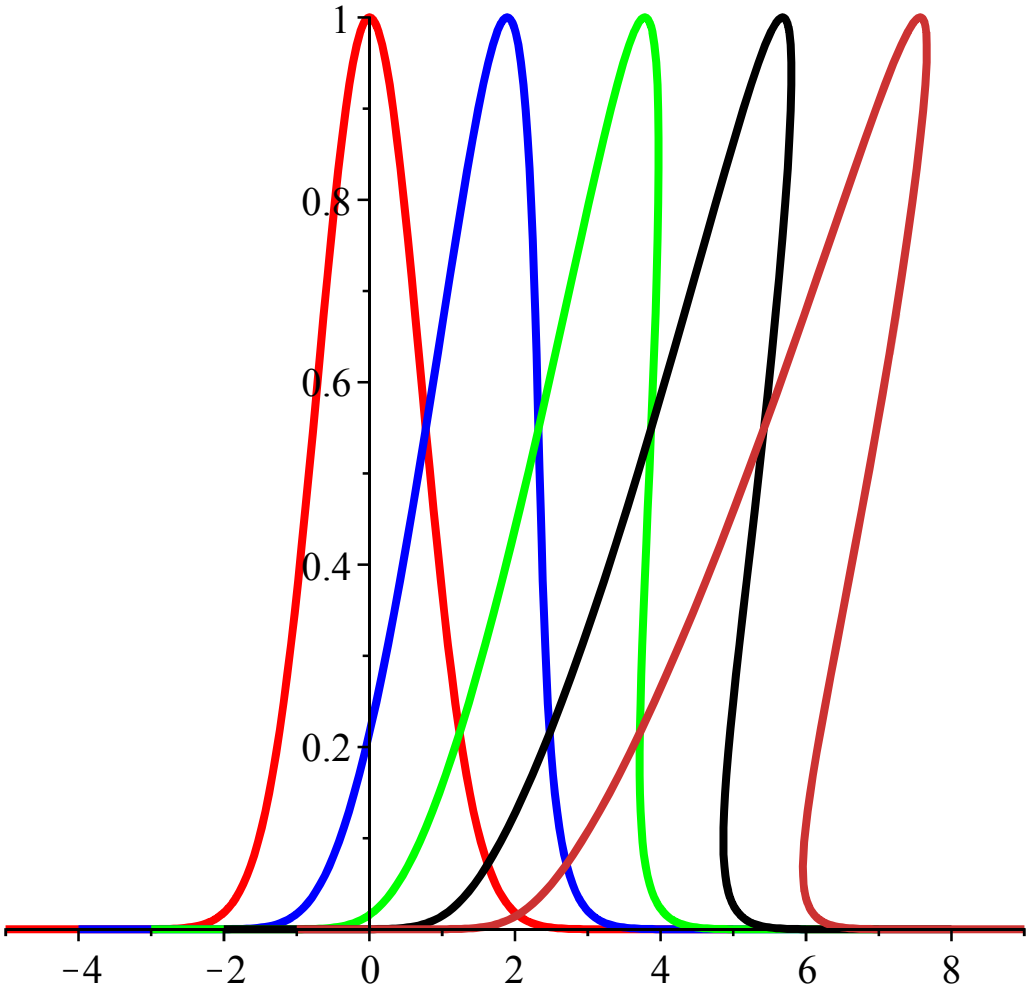
$$x := (w, t, g) \to w + u(w, g)\, t \tag{4}$$

> $plot([x(w, 0, 1.4), f(w), w = -5..5]);$

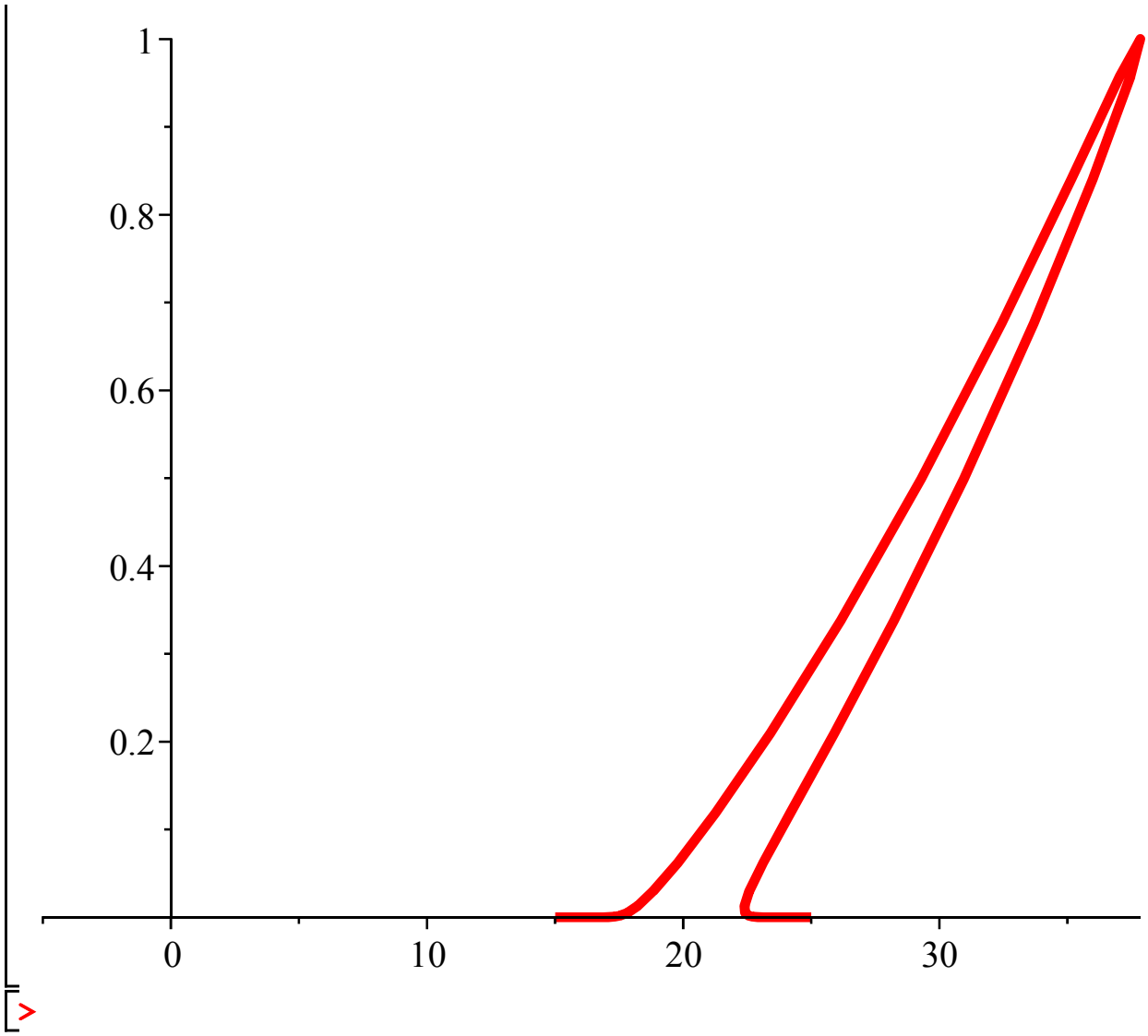



```
>
```

```
> plot( {[x(w, 0, 1.4), f(w), w = -5 ..5], [x(w, 1, 1.4), f(w), w = -5 ..5], [x(w, 2, 1.4), f(w), w =
      -5 ..5], [x(w, 3, 1.4), f(w), w = -5 ..5], [x(w, 4, 1.4), f(w), w = -5 ..5]}, thickness = 3, color
      = [red, blue, green, black, orange]);
```




```
> animate( [x(w, t, 1.4), f(w), w = -5 ..5 ], t = 0 ..20, thickness = 4 );
```


1
0.8
0.6
0.4
0.2
0
10
20
30
>