Getting a Mixing Parameter

// create a value of 0. or 1. from the value of x wrt edge:
float  t  =  step( float edge, float x );

// create a value in the range 0. to 1. from the value of x wrt edge0 and edge1:
float  t  =  smoothstep( float edge0, float edge1, float x );

Getting a Mixing Parameter

Using that Mixing Parameter to Blend Two Quantities

// use the returned value from step( ) or smoothstep( ) to blend value0 to value1:
T  out  =  mix( T  value0,  T  value1,  float  t );

where T can be just about any type: float, vec2, vec3, vec4, ...

One would expect 0 ≤ t ≤ 1,
but that doesn’t have to be true. After all, these are just numbers.

For a fun exercise with this, go back and change the morphing slider to go beyond 0.-1.

As we will see later, there are really good uses for going beyond the range 0.-1.

Fun With One

Moral: There are many ways to turn \([ 0. - 1. ]\) into \([ 0. - 1. ]\).
Both go from 0. to 1.
Both have initial and final slopes of 0.
The quintic has initial and final curvatures of 0.