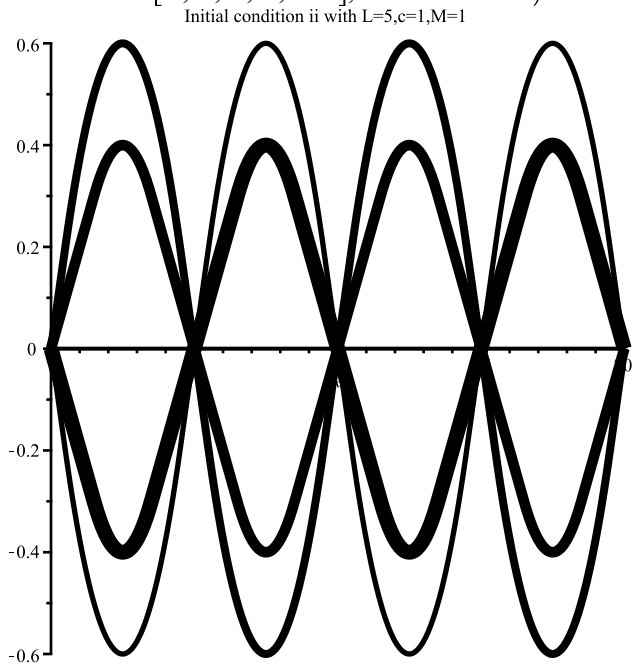
```
> kn :=
      int( 2·M·x/L · sin( n·Pi·x/L ), x = 0 .. L/2 ) + int( 2·M·(L − x)/L · sin( n·Pi·x/L ), x = L/2 .. L )
      ------------------------------------------------------------------------------------------------------ :
                                        int( sin^2( n·Pi·x/L ), x = −L .. L )

> simplify(kn) :

> kn := simplify(kn) :

> an := kn·L/(c·n·Pi) :

> with(plots) :

> psum := subs( M = 1, L = 5, c = 1, sum( an·sin( n·Pi·x/L ) · sin( c·n·Pi·t/L ), n = 1 .. 100 ) ) :

> curves := {seq(subs(t = 2·m, psum), m = 0 .. 10)} :

> plot(curves, x = 0 .. 20, thickness = [1, 2, 3, 4, 5.6], color = black)
```




```
> animate(psum, x = 0 .. 20, t = 0 .. 10) :

>
```