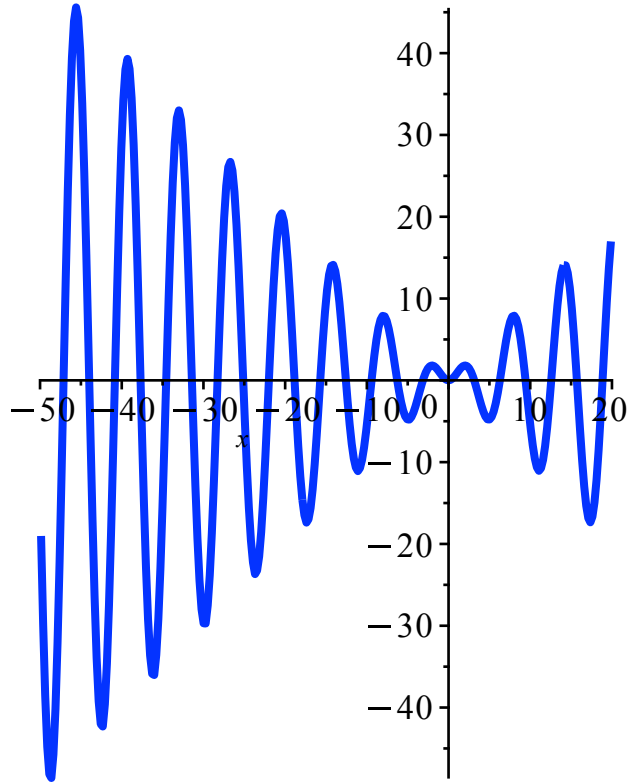


```
> factor(X10 - 1);  
      (X - 1) (X + 1) (X4 + X3 + X2 + X + 1) (X4 - X3 + X2 - X + 1)
```

(1)

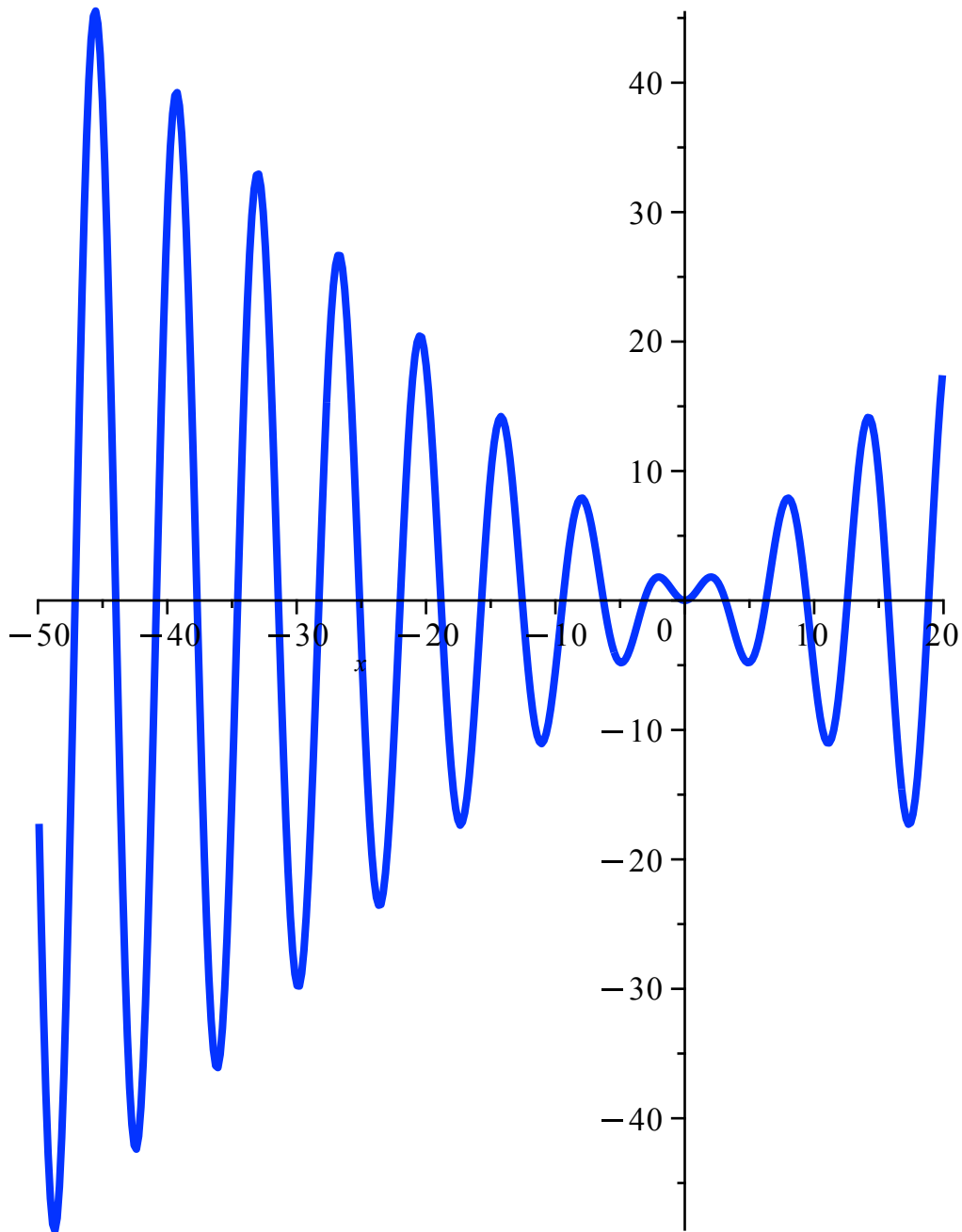
Let's make a plot and use stuff on the side to adjust it.

```
> plot(x·sin(x),  
      x = -50 ... 20)
```



Now do it in the command.

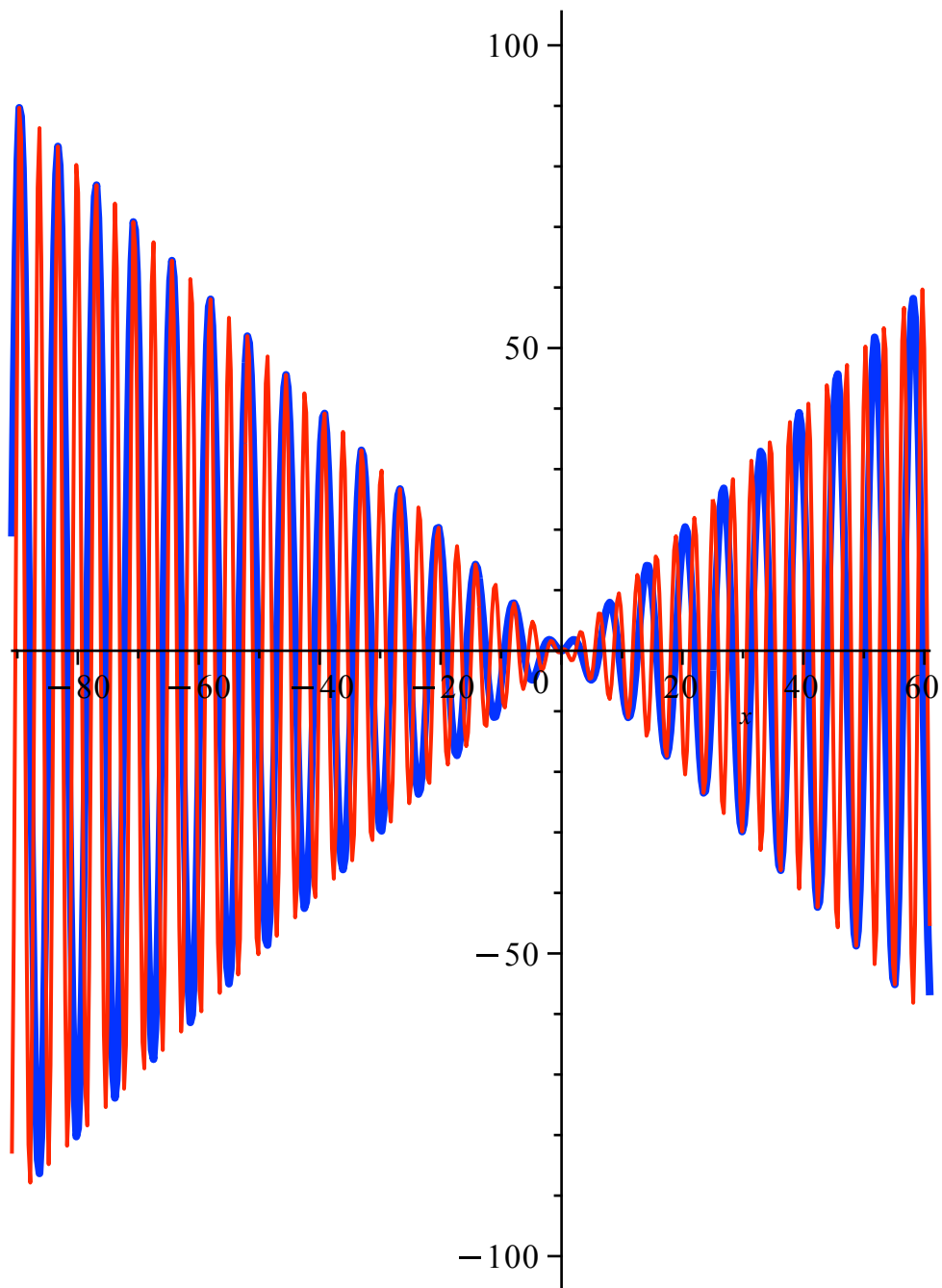
```
> plot(x·sin(x), x = -50 ... 20, scaling = constrained, color = blue, thickness = 3)
```



```
> plot(x·sin(x), x·cos(2 x), x=-50 ... 20, scaling = constrained, color = blue, thickness = 3)
```

Error, (in plot) unexpected options: [x*cos(2*x), x = -50 .. 20]

```
> plot([x·sin(x), x·cos(2 x)], x=-50 ... 20, scaling = constrained, color = [blue, red], thickness  
= [3, 1])
```



```
> 2126
85070591730234615865843651857942052864 (2)
```

```
> evalf(Pi);
3.141592654 (3)
```

```
> evalf(Pi, 200)
3.14159265358979323846264338327950288419716939937510582097494459230781640628620\ (4)
8998628034825342117067982148086513282306647093844609550582231725359408128481\
1174502841027019385211055596446229489549303820
```

```
> Digits := 30
Digits := 30 (5)
```

> evalf(Pi);
3.14159265358979323846264338328 (6)

> ?evalf

> a := 27;
a := 27 (7)

> b = 27;
b = 27 (8)

> a·b
27 b (9)

> a = 16;
27 = 16 (10)

>
:= does assignment = is part of an equation, either true or not.

> f := x² - 1
f := x² - 1 (11)

> f(2)
x(2)² - 1 (12)

> factor(f);
(x - 1) (x + 1) (13)

not what I meant. -> give an arrow

> g := x → x² - 1
g := x ↦ x² - 1 (14)

> g(2)
3 (15)

> g(f)
(x² - 1)² - 1 (16)

> diff(1/x, x)
- 1/x² (17)

> [x 1\$][x 1\$][x 1\$]a;
D_{x@38}(x ↦ 1/x) (18)

> a
27 (19)

> g(a)
728 (20)

> unassign('a');

> a

		a	(21)
	>	f ,	
		$x^2 - 1$	(22)
	>	$f := f$;	
		$f := f$	(23)
	>	f ,	
		f	(24)
	>	$this := \text{"this is some string of letters"};$	
		$this := \text{"this is some string of letters"}$	(25)
	>	$this[6];$	
		"i"	(26)
	>		