

```
> restart;
```

```
>
```

```
Rappel: alpha = -qE_0/m, omega = qB_0/m
```

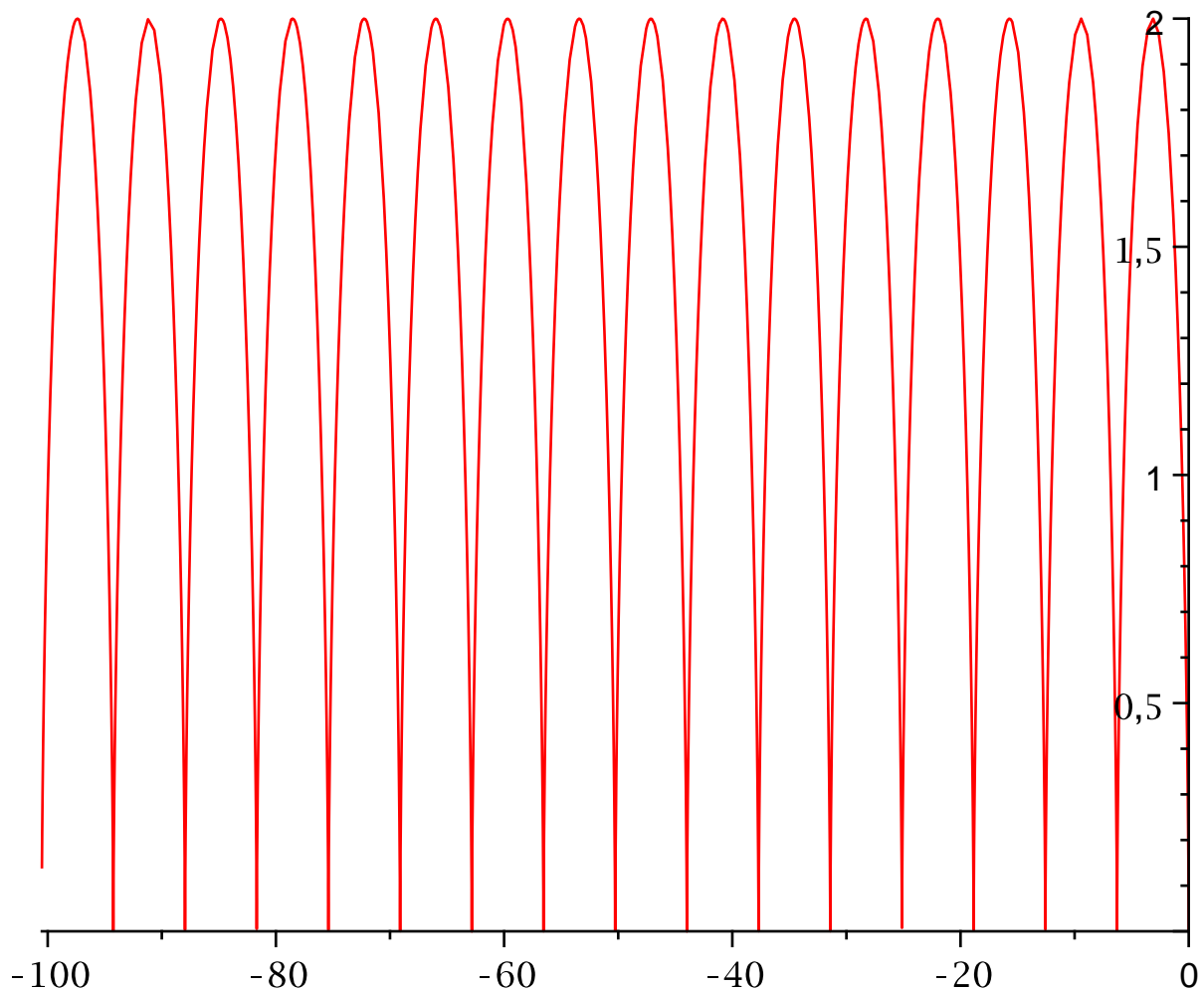
```
> x := (alpha, omega, t) ->  $\frac{\text{alpha}}{\omega^2} \cdot (\text{omega} \cdot t - \sin(\text{omega} \cdot t));$ 
```

$$x := (\alpha, \omega, t) \rightarrow \frac{\alpha (\omega t - \sin(\omega t))}{\omega^2} \quad (1)$$

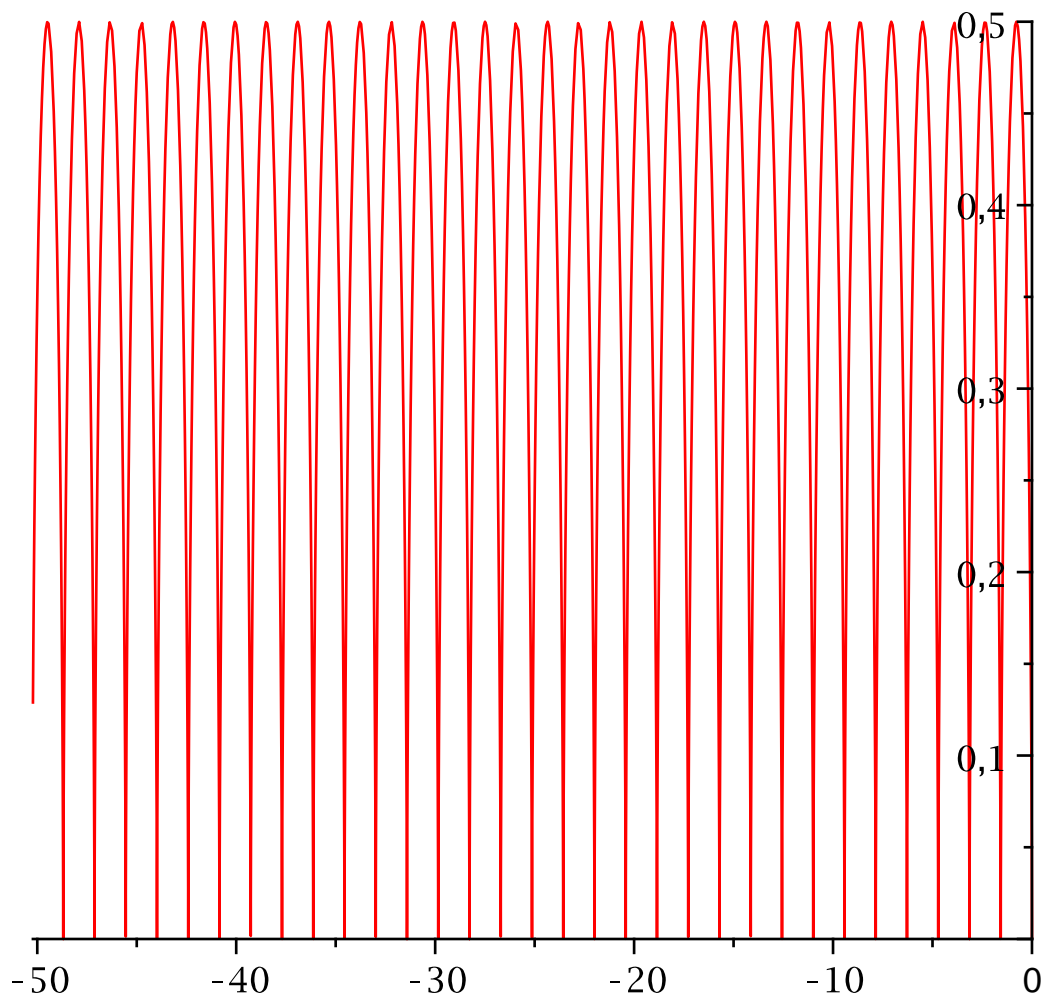
```
> z := (alpha, omega, t) ->  $\frac{-\text{alpha}}{\omega^2} \cdot (1 - \cos(\text{omega} \cdot t));$ 
```

$$z := (\alpha, \omega, t) \rightarrow -\frac{\alpha (1 - \cos(\omega t))}{\omega^2} \quad (2)$$

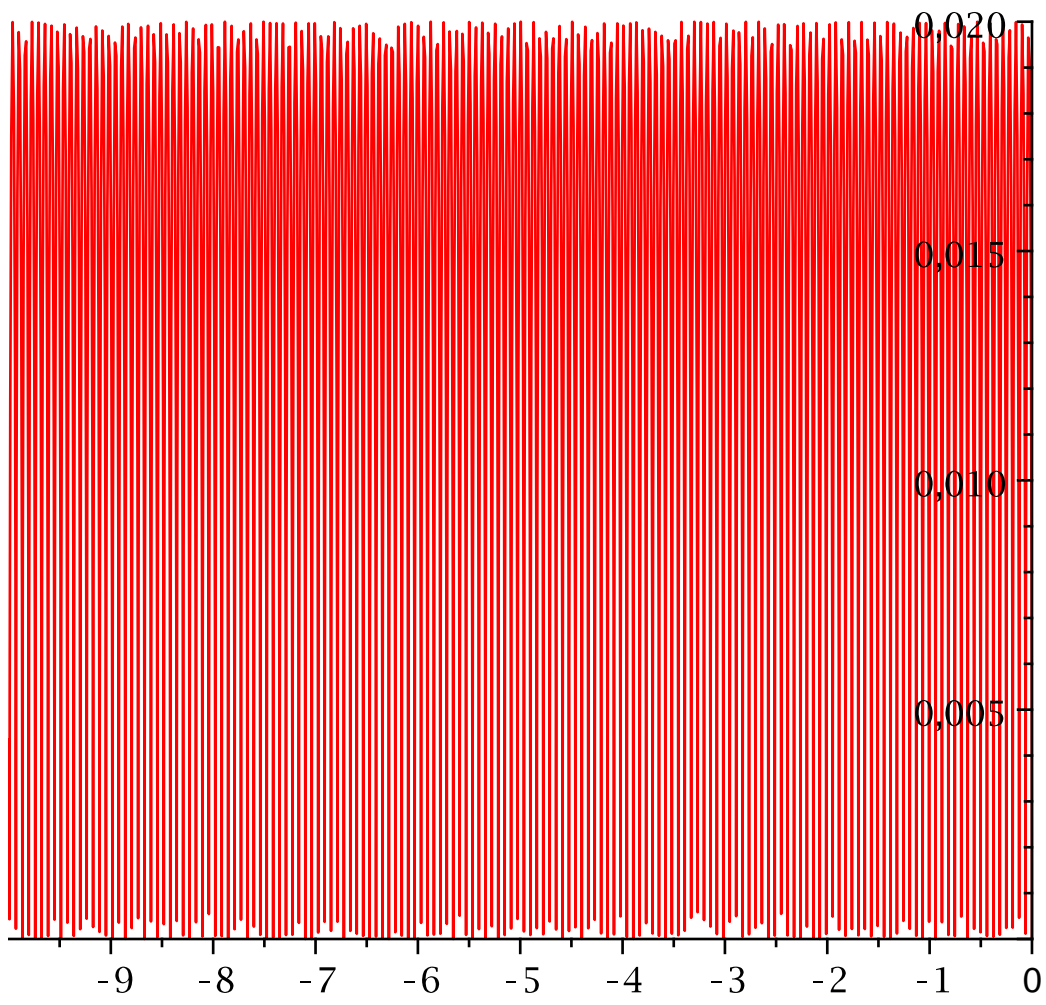
```
> plot([x(-1, 1, t), z(-1, 1, t), t = 0..100]);
```



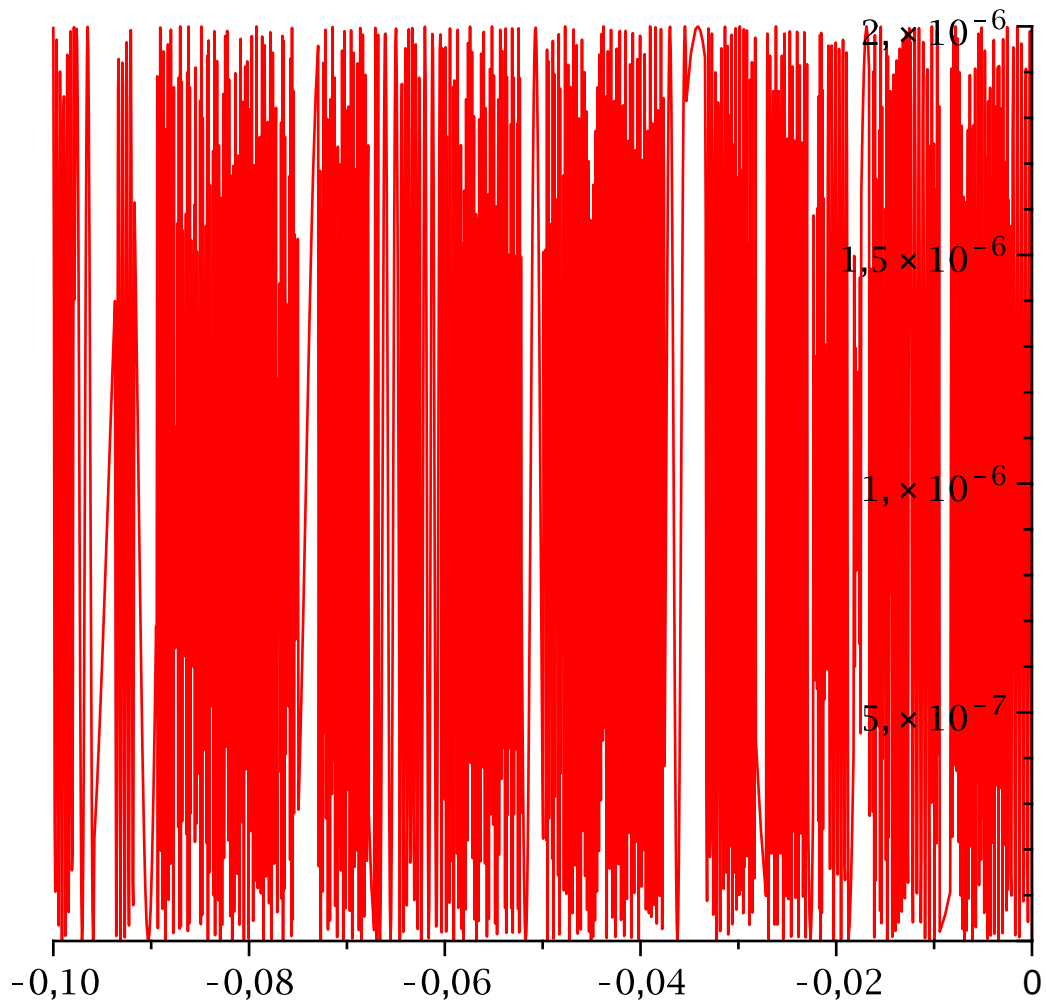
```
> plot([x(-1, 2, t), z(-1, 2, t), t = 0..100]);
```



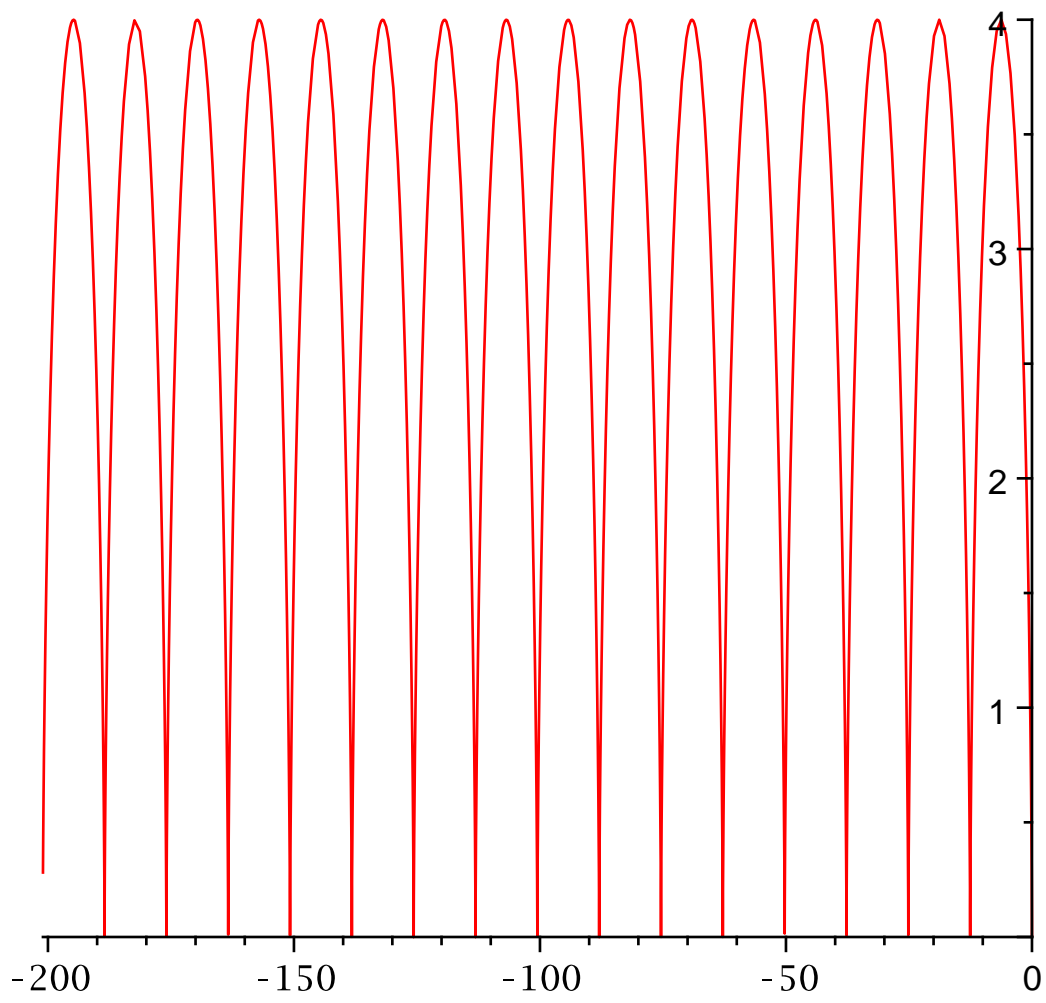
```
> plot([x(-1, 10, t), z(-1, 10, t), t = 0..100]);
```



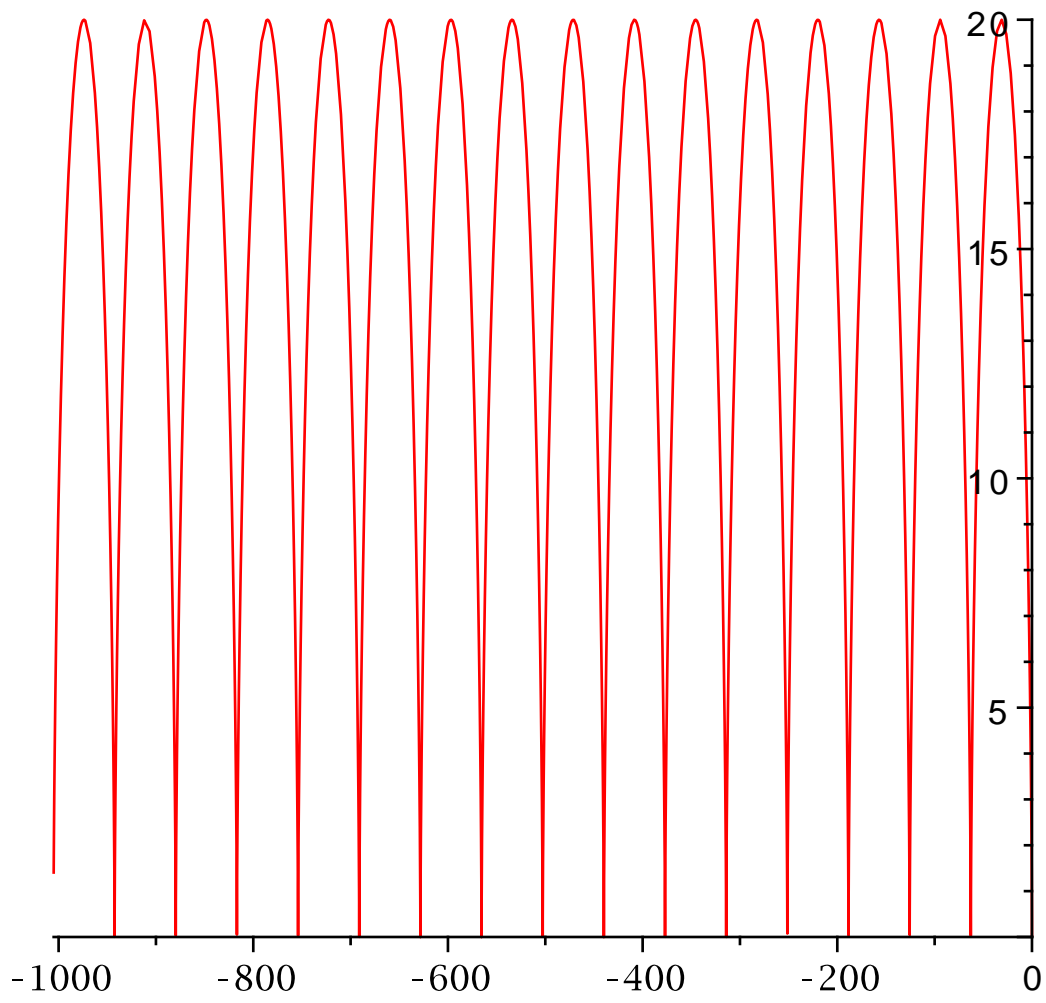
```
> plot([x(-1, 1000, t), z(-1, 1000, t), t = 0..100]);
```



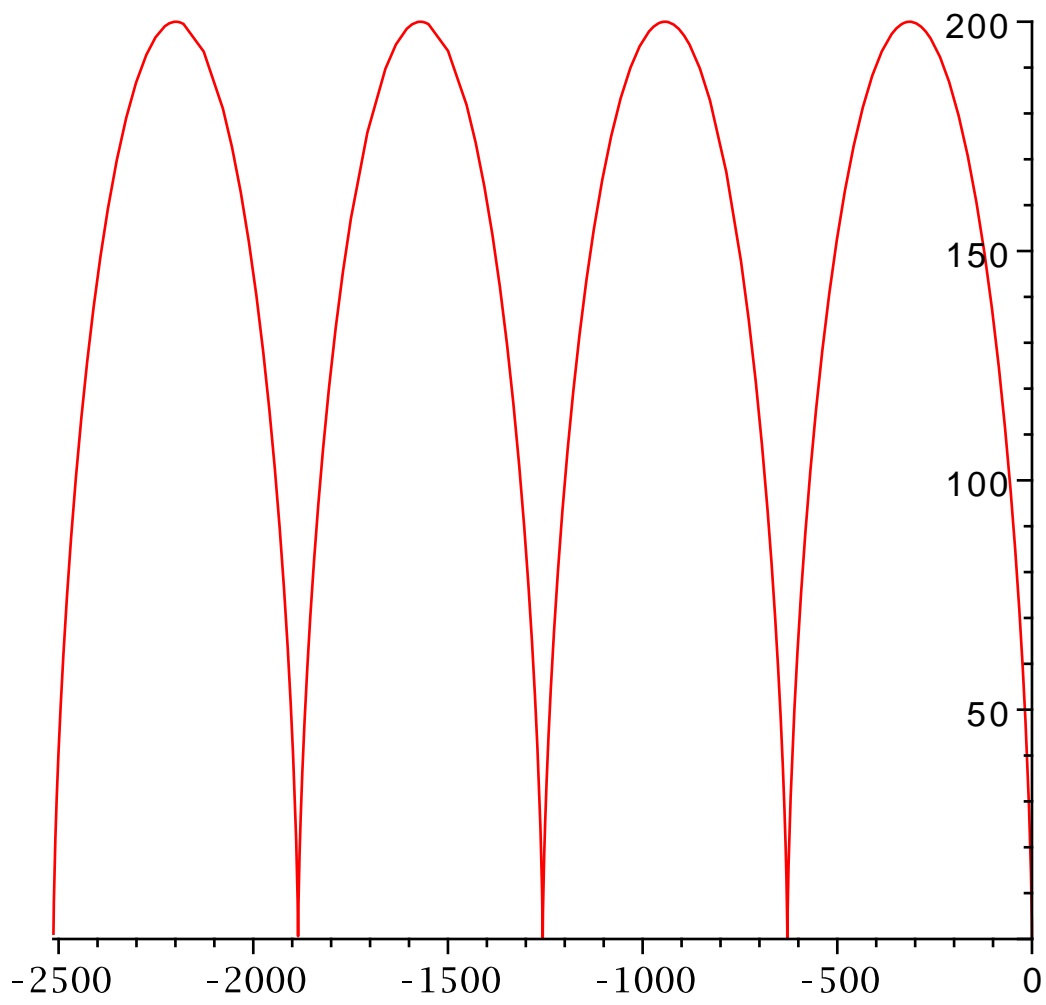
```
> plot([x(-2, 1, t), z(-2, 1, t), t = 0..100]);
```



```
> plot([x(-10, 1, t), z(-10, 1, t), t = 0..100]);
```



```
> plot([x(-100, 1, t), z(-100, 1, t), t = 0..25]);
```



```
> plot([x(-100, 1, t), z(-100, 1, t), t = 0..25]);
```

