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```
function [ ] = Sinus()

x=(-pi:0.001:4*pi);

f=figure(1);

title('Sinus and squarewave')
axis('auto')
q=plot(x,sin(x)), xlabel('time (x values)'), ylabel('y'), grid on

set(q, 'Color', 'green', 'LineWidth', 2)

legend('sin(x)', 'square(x)')

hold on

for i=1:length(x)

if sin(x(i))<0

wave(i)=-1;

else

wave(i)=1;

end

end

p=plot(x,wave)

set(p, 'Color', 'red', 'LineWidth', 2)

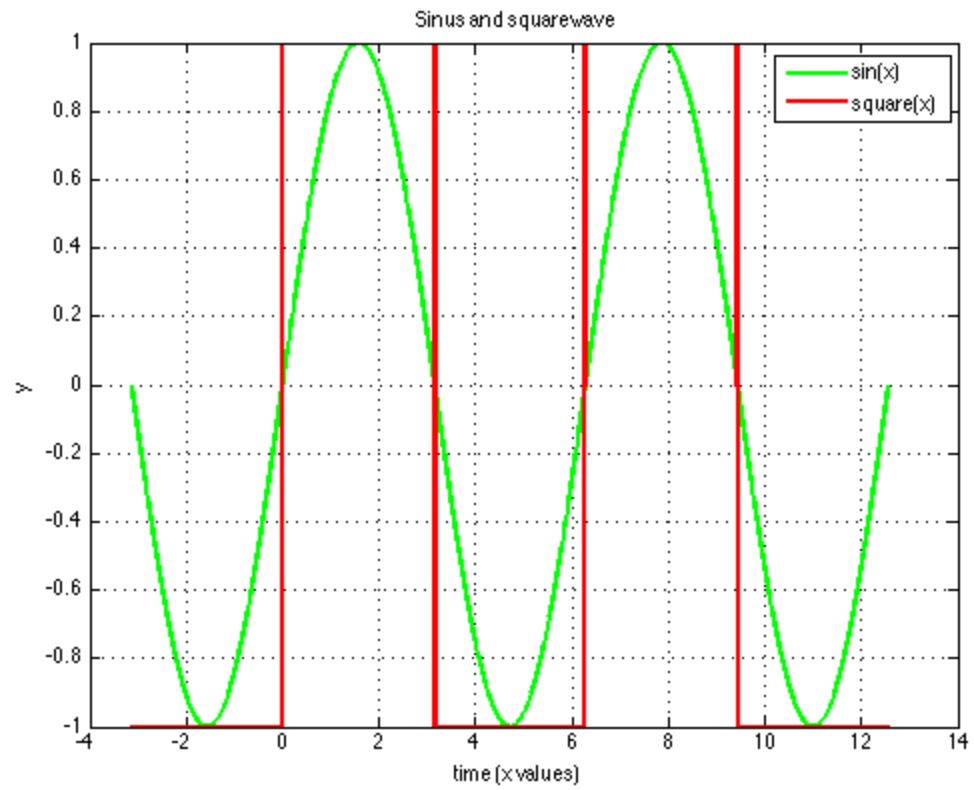
end
```

```
q =
```

```
422.0012
```

```
p =
```

```
418.0012
```



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