

Matlab notes for Homework 3

```
syms g(x)
g(x)=3*x^3+4*x^2+3*x-5/x;
```

The derivative of $g(x)$ is

```
gp(x)=diff(g,x)
```

$gp(x) =$

$$8x + \frac{5}{x^2} + 9x^2 + 3$$

$g'(1)$ is

```
gp(1)
```

ans = 25

$g'(-1)$ is

```
gp(-1)
```

ans = 9