

MAU22C00 Assignment 0, Due Friday 22 September 2023

1. Insert parentheses in the expression “not p and q or p ” to make each of the following truth tables correct:

	p	q	not p and q or p
	F	F	F
(a)	F	T	T
	T	F	F
	T	T	F

	p	q	not p and q or p
	F	F	F
(b)	F	T	T
	T	F	T
	T	T	T

	p	q	not p and q or p
	F	F	T
(c)	F	T	T
	T	F	T
	T	T	T

	p	q	not p and q or p
	F	F	T
(d)	F	T	T
	T	F	F
	T	T	F

2. The ambiguous grammar

```
%start start
```

```
%%
```

```
start : x | start start ;
```

can generate `xxxx` in multiple ways. How many? Draw a parse tree for each.

3. What language does the following grammar generate?

```
%start expression
```

```
%%
```

```
expression : expression ;
```