2.3:

2.4:

Do the following statements terminate:
while $\neg(\mathtt{x} = 1)$ **do** $(\mathtt{y} := y * x;\ \mathtt{x} := x - 1)$

while $1 \leq \mathtt{x}$ **do** $(\mathtt{y} := y * x;\ \mathtt{x} := x - 1)$

while $true$ **do skip**

1 2.6:

Show that $S1; (S2; S3)$ and $(S1; S2); S3$ are semantically equivalent:

Show that $S1; S2$ and $S2; S1$ are not always semantically equivalent:

2 2.7:

While can be extended with the **repeat** S **until** b statement:

3 2.8: