3 **(a)** Solve the inequality $|3x-4| \leqslant |2x+5|$. [4]

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(b) Hence find the largest integer N satisfying the inequality $|3 \times 7^{0.01N} - 4| \leqslant |2 \times 7^{0.01N} + 5|$. [3]

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....