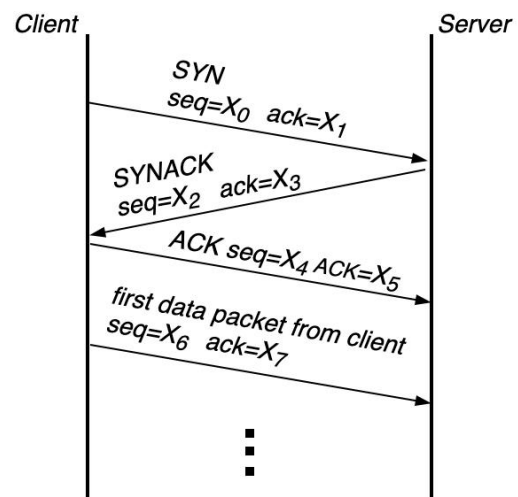1) Consider a TCP connection between a client and a server.

Assume that the client's Initial Sequence Number (ISN) is 1000, and the server's ISN is 500. Refer to the figure below and determine the values in the fields of the TCP segments.

X_0=_____ $\quad$ X_1=_____

X_2=_____ $\quad$ X_3=_____

X_4=_____ $\quad$ X_5=_____

X_6=_____ $\quad$ X_7=_____

2) We make the following assumptions:

- Over this connection there is never any packet loss and the timers never expire;

- The client always has data to send;

- Size of each TCP data segment is 2KB;

- The server's initial receive window size is 64KB;

- The client's initial slow start threshold is 128KB;

- The application layer process on the server side never takes away any data from its TCP receive buffer.

What is the value of the TCP sender window size **after** the 5**th** round? Please explain your answer.