1. How many characters can be displayed on the screen at the same time?

Total number of pixels = 126 x 125=15,750

Number of pixels per character = 8 x 5 = 40

Total number of characters that can be displayed at a time = 15,750/40 = 393

1. How long does it take to fill an entire row with characters?

It takes about 49,000 ticks to fill a row. A tick is 2 x 1/48,000,000 seconds.

So it takes about 49,000 x 2 x 1/48,000,000 = 0.0002042 seconds = 2.042 ms.