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## Solution

**Simulator:** pagetrans.py

**Command:** **python ./pagetrans.py -a 8k -p 512 -r 128k -s 104**

**Solution:**

Virtual Address Trace

VA <b>0x00001231</b> (decimal: <b>4657</b> ) →	<b>RA 0xC831 [VPN= 9]</b>
VA <b>0x00000335</b> (decimal: <b>821</b> ) →	<b>RA 0x7535 [VPN= 1]</b>
VA <b>0x00001320</b> (decimal: <b>4896</b> ) →	<b>RA 0xC920 [VPN= 9]</b>
VA <b>0x000019a8</b> (decimal: <b>6568</b> ) →	<b>Invalid [VPN= 12]</b>
VA <b>0x00001a7f</b> (decimal: <b>6783</b> ) →	<b>Invalid [VPN= 13]</b>

**Simulator:** pagetablesizes.py

**Command:** **python ./pagetablesizes.py -v 38 -e 8 -p 2K**

**Solution:**

Virtual Address (VA) = [Virtual Page Number (VPN) | Offset (D)]

VA (bits)	VPN (bits)	D (bits)	pte (byte)
<b>38</b>	<b>27</b>	<b>11</b>	<b>8</b>

Calculate (Linear Page Table Size) and write the results in the simplest readable form (e.g. byte, KB, MB, GB, and TB)

**Linear Page Table Size = 1073.7 MB**