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## Solution

**Simulator:** pagetrans.py

**Command:** **python ./pagetrans.py -a 8k -p 2k -r 64k -s 101**

**Solution:**

Virtual Address Trace

VA 0x00000718 (decimal: 1816) →	<b>RA</b> 0x00003718 [VPN= <b>0</b> ]
VA 0x0000093b (decimal: 2363) →	<b>RA</b> 0x0000e93b [VPN= <b>1</b> ]
VA 0x00001628 (decimal: 5672) →	<b>RA</b> Not Valid [VPN= <b>0</b> ]
VA 0x000006cb (decimal: 1739) →	<b>RA</b> 0x000036cb [VPN= <b>0</b> ]
VA 0x00001f13 (decimal: 7955) →	<b>RA</b> 0x00003713 [VPN= <b>3</b> ]

**Simulator:** pagetablesize.py

**Command:** **python ./pagetablesize.py -v 38 -e 4 -p 4k**

**Solution:**

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

VA (bits)	VPN (bits)	D (bits)	pte (byte)
<b>38</b>	<b>26</b>	<b>12</b>	<b>4</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 =  $4 \times 2^{26} = 268,435,456 = 268.44 \text{ MB}$**