OP-AMP Problem 2

Consider the op-amp circuit shown below. Assume the maxiumum output voltage of the op-amp ranges from – 12 V to + 12 V; the maximum output current magnitude is 25 mA; and the slew-rate limit is 1.5 V/µs. If , R1 = 5 kΩ, and R2 = 25 kΩ

1. Find the full-power bandwidth of the op-amp;
2. Find the peak output voltage possible without distortion for the following cases:
   1. Frequency of 5 kHz and RL = 20 Ω
   2. Frequency of 5 kHz and RL = 2.5 kΩ
   3. Frequency of 50 kHz and RL = 2.5 kΩ

