Boyle's Law Problems

1. A 5 liter sample of gas at a pressure of 760mm is compressed to 2.5 liters at constant temperature. What is the new pressure of the gas?
2. If 200 ml of a gas is at a pressure of 760mm, what will the volume of the gas be if the pressure is increased to 1520mm?
3. If 40ml of a gas is stored at 760mm pressure, what will the volume of the gas be if the pressure is increased to 800mm?
4. A 1 liter sample of gas at a pressure of 3 atm. Is put into a 3 liter container at constant temperature. What is the new pressure of the gas?
5. The volume occupied by a sample of gas is 240ml when the pressure is 780 mm Hg. What volume, at constant temperature will the gas occupy when the pressure is decreased to 750 mm Hg?
6. The volume occupied by a sample of gas is 480ml when the pressure is 800 mm Hg. What pressure must be applied to the gas to make its volume become 600ml?
7. A sample of gas occupies a volume of 2.00L when the pressure is 2.00 atm. If the pressure is changed to 1.50 atm., what volume will the gas occupy, assuming that there is no change in the temperature?
8. When the pressure exerted by a sample of gas is multiplied by the volume occupied by the sample, the result of this multiplication is 1.60×10^5 mm Hg - ml. The pressure exerted by the sample changes to a new value which happens to be 750 mm Hg. What volume will the sample occupy at this pressure, assuming that temperature is kept constant?