

Answers

1. Boyle – Marriotte graph: Inversely proportional.
2. 15 L
3. 1.83 g/L
4. Volume and temperature are directly proportional. $V_1T_1 = V_2T_2$
5. 2.0 atm
6. 12.0 L
7. 3.5 atm
8. 3.3 atm
9. 187.5 moles
10. Particles have no volume. No intermolecular forces. As different gases would have different forces and volumes and therefore would behave differently. Most valid at high temperatures and low pressures as there would be least impact from size of molecules and intermolecular forces as they have more space to move in and higher velocity.