Graph It Out: Density from Data Answer Key

1.

a) Line is linear through all points.
b) Slope = (40.3 − 8.0) / (50 − 10) = 32.3 / 40 = **0.81 g/mL**
c) Density = **0.81 g/mL**

2. Slope = (100 − 25) / (40 − 10) = 75 / 30 = **2.5 g/mL**
   → Density = **2.5 g/mL**

3. $D = 80/10 = 8.0$ g/mL

4. $D = 40/50 = 0.8$ g/mL; first sample (8.0) is **denser**.

5. 7.9 g/cm³ → **Iron**

6. Least → Most: **A (0.8), B (1.2), C (1.4)**