

Semilog and double-log Problems

Solutions are given at the end.

1. Given the semilog plot in Figure 1, find a functional relationship between x and y .

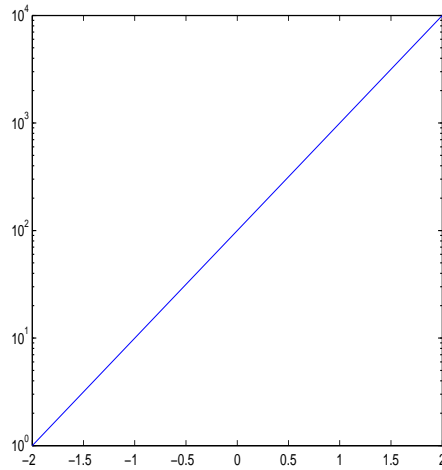


Figure 1: Figure for Problem 1.

2. Given the semilog plot in Figure 2, find a functional relationship between x and y .

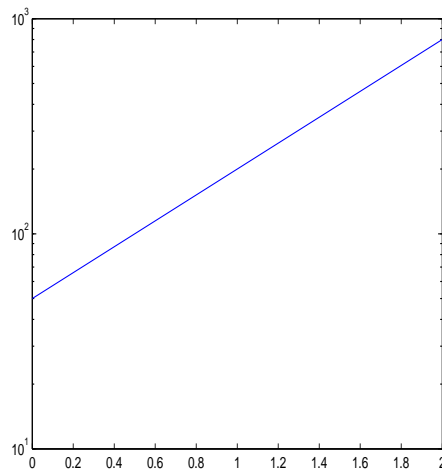


Figure 2: Figure for Problem 2.

3. Given the double-log plot in Figure 3, find a functional relationship between x and y .

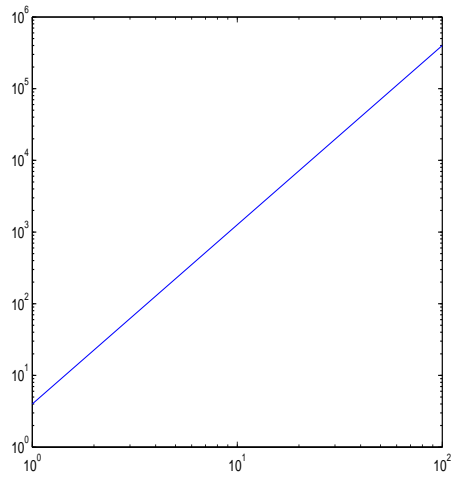


Figure 3: Figure for Problem 3.

4. Given the double-log plot in Figure 4, find a functional relationship between x and y .

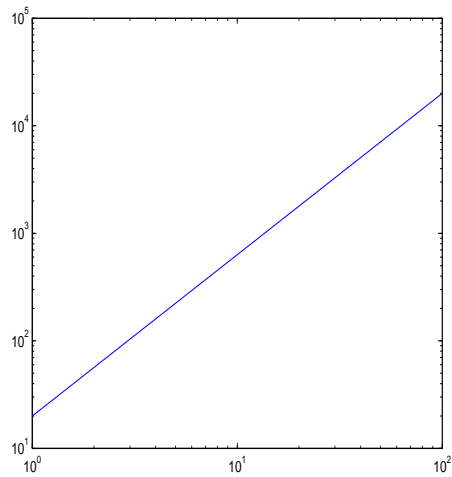


Figure 4: Figure for Problem 4.

5. Given the double-log plot in Figure 5, find a functional relationship between x and y .

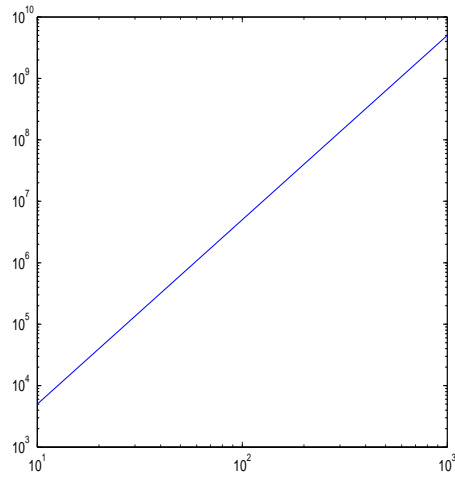


Figure 5: Figure for Problem 5.

Solutions

1. $y = 100 \cdot 10^x$
2. $y = 50 \cdot 4^x$
3. $y = 4x^{\frac{5}{2}}$
4. $y = 20x^{\frac{3}{2}}$
5. $y = 5x^3$