1.What is the intersection of the sets {2, 4, 6, 8} and {3, 6, 9, 12}?

Answer: The intersection of the two sets is {6}.

2.What is the union of the sets {1, 2, 3} and {3, 4, 5}?

Answer: The union of the two sets is {1, 2, 3, 4, 5}.

3.What is the complement of the interval (-3, 5] on the number line?

Answer: The complement of (-3, 5] is the interval (-∞, -3] U (5, ∞).

4.What is the midpoint of the interval [4, 10]?

Answer: The midpoint of the interval [4, 10] is 7.

5.What is the length of the interval (-2, 7)?

Answer: The length of the interval (-2, 7) is 9.