Set Operations Practice: Union, Intersection, and Complement

Original tasks 1, 2 / independent work

Task 1

Let U = {1, 2, 3, 4, 5, 6, 7, 8}, A = {1, 3, 5, 7}, and B = {2, 3, 5, 8}. Find A ∪ B and A ∩ B.

Task 2

Let U = {a, b, c, d, e, f}, C = {a, c, e}, and D = {b, c, d}. Find C′ and C ∩ D.

Set Operations Practice: Union, Intersection, and Complement

Original tasks 3, 4 / independent work

Task 3

Let U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}, E = {2, 4, 6, 8, 10}, and F = {1, 2, 3, 4, 5}. Find (E ∪ F)′.

Task 4

Let U = {1, 2, 3, 4, 5, 6, 7, 8}, G = {1, 2, 3, 4}, and H = {3, 4, 5, 6}. Find G ∩ H′.