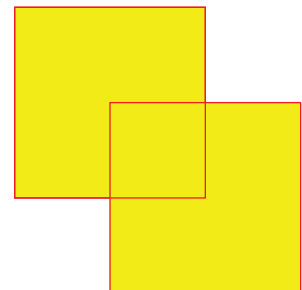


Oops, let's fix that! (Inclusion-Exclusion)

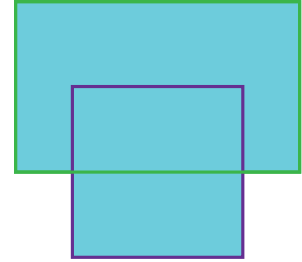
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1. There are 9 girls and 8 boys in a 3rd grade class. How many students are in that class?
2. In the same class 10 students speak Spanish and 9 students speak Chinese. How many students speak both Spanish and Chinese?
3. In a 5th grade class every student plays at least one musical instrument: 10 students play the piano, 6 play the guitar, and 2 play both. How many students are in the class?
4. In a school with 351 students, each has a bicycle or a skateboard, or both. If 331 students have bicycles and 45 have skateboards, how many of the bicycle owners do not have a skateboard?
5. The large red squares each have area 4. The area of their overlap is 1. What is the area of the region colored yellow?



6. The area of the green rectangle is 15; the area of the purple square is 9; and half of the square is inside the rectangle. What is the area of the region colored blue?



7. A book has pages numbered 1 to 100. How many of the page numbers **contain** the numeral 5?
8. How many numbers from 1 to 100 are **not** divisible either by 2 or by 3?
9. 20 students stay for after school activities: 10 do math, 13 do running, and 9 do skateboarding. 9 students do two activities. How many students do all three activities?
10. How many numbers from 1 to 100 are **not** divisible by 2 or by 3 or by 5?
11. Use the Inclusion-Exclusion Principle to write a formula for the number of prime numbers between 1 and 100.

