To convert the decimal number 9.45 into a mixed number, follow these steps:

1. **Identify the whole number:** The number before the decimal point (9) is the whole number.
2. **Convert the decimal to a fraction:** Take the decimal part (0.45) and convert it into a fraction. Since 0.45 is equal to 45/100, we simplify this fraction. To do this, find the greatest common divisor (GCD) of 45 and 100, which is 5.
3. **Simplify the fraction:** Divide both the numerator and the denominator by 5:
    - 45 Ã· 5 = 9
    - 100 Ã· 5 = 20
4. This simplifies 0.45 to 9/20.
5. **Combine the whole number and the fraction:** Now combine the whole number (9) with the simplified fraction (9/20). Therefore, the mixed number is:

9 9/20

Thus, 9.45 as a mixed number is **9 9/20**.