Additional Example from Section 5.4 – Pregnancy Tests

A study found that in general when women volunteers tested urine with home pregnancy tests the accuracy is about 91%. Suppose that this means that 91% of women that are pregnant are accurately identified as being pregnant by the home pregnancy test and suppose that 98% of women that are not pregnant are accurately identified as not being pregnant by the home pregnancy test. Suppose that 60% of women that use a pregnancy test are actually pregnant. (“Diagnostic Efficiency of Home Pregnancy Test Kits A Meta-analysis” by Lori A. Bastian, MD, MPH; Kavita Nanda, MD, MHS; Vic Hasselblad, PhD; David L. Simel, MD, MHS)

What percentage of women who get a pregnant result from the test are actually pregnant?