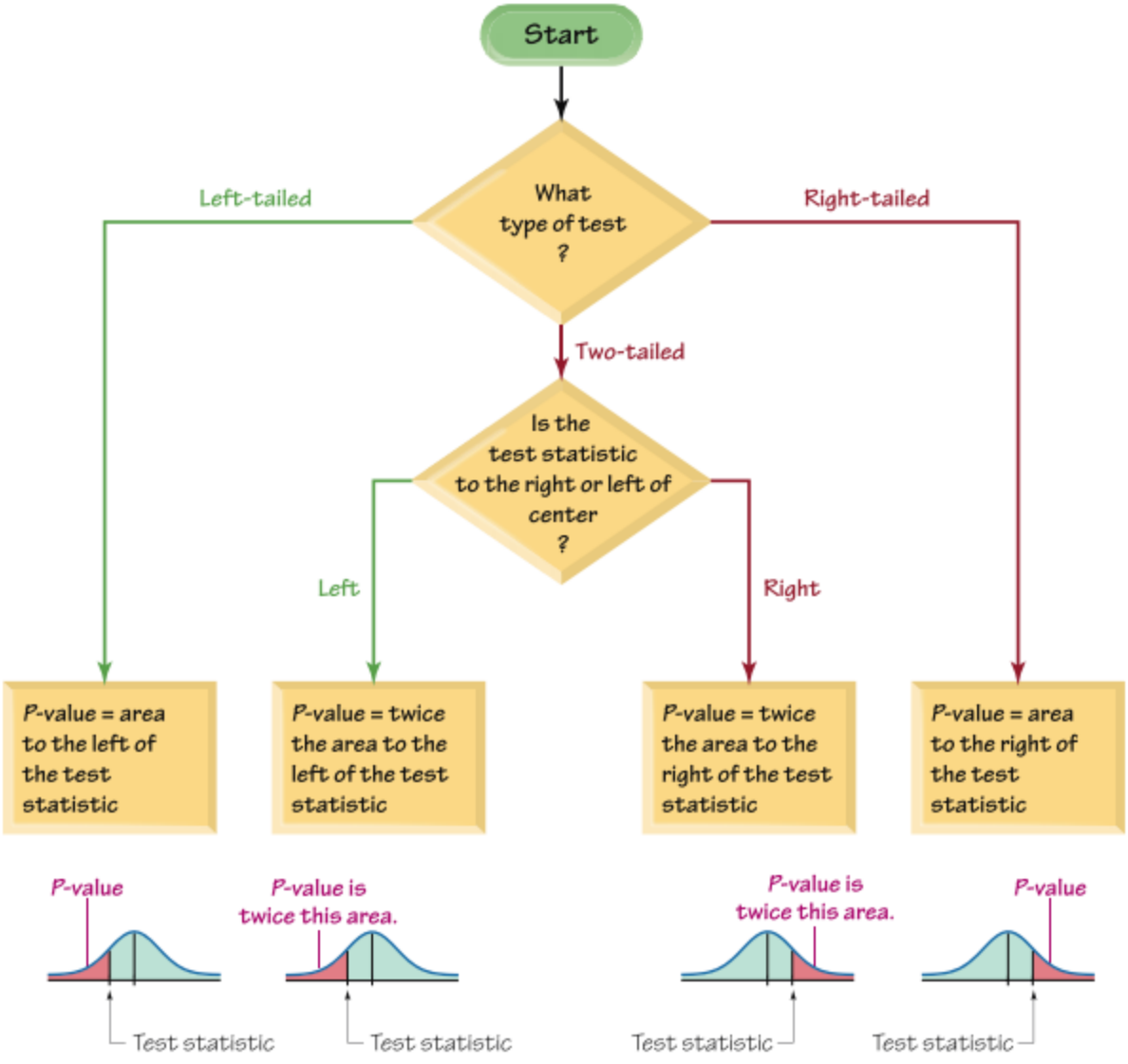

Figure 8-4 Procedure for Finding *P*-Values

displays given earlier, and note that each of them provides the same *P*-value of 0.055 after rounding.)

CAUTION Don't confuse a *P*-value with a proportion *p*. Know this distinction:

***P*-value** = probability of a test statistic at least as extreme as the one obtained

p = population proportion

Critical Value Method With the critical value method (or **traditional method**), we find the **critical value(s),** which separates the critical region (where we reject the null hypothesis) from the values of the test statistic that do not lead to rejection of the null hypothesis. Critical values depend on the nature of the null hypothesis, the sampling distribution, and the significance level α.

EXAMPLE The critical region in Figure 8-5 is shaded in red. Figure 8-5 shows that with $\alpha = 0.05$, the critical value is $z = 1.645$.