STA220H1 Practice Problems – The Process of Statistical Tests

1. Given the null and alternative hypothesis, sample size, and test statistics, use R to find the p-value.

Hypotheses	n	Test statistic	P-value
$H_0: \ \mu = 10$ $H_A: \ \mu > 10$	20	2.0	
$H_0: \ \mu = 10$ $H_A: \ \mu < 10$	70	0.6	
$H_0: \ \mu = 10$ $H_A: \ \mu \neq 10$	240	2.5	
$H_0: \ p = 0.1$ $H_A: \ p < 0.1$	250	-1.40	
$H_0: \ p = 0.1$ $H_A: \ p > 0.1$	250	-1.40	
$H_0: \ p = 0.1$ $H_A: \ p \neq 0.1$	100	2.13	