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26. $H_0: \mu = 1.3$ $H_a: \mu > 1.3$ $\mu =$ ^{true} mean content of copper
in the water from the new
source

a) Type I Error

Finding convincing evidence that the true mean copper content of the water from the new source is greater than 1.3 mg/liter when it really isn't.

Type II Error:

Not finding convincing evidence that the true mean copper content of the water from the new source is greater than 1.3 mg/liter but it really is.

b) Type II error is more serious because the water would not be safe for drinking but you think it is.

c) We want to decrease a Type II error so we need to increase probability of Type I error so we should increase the α level