





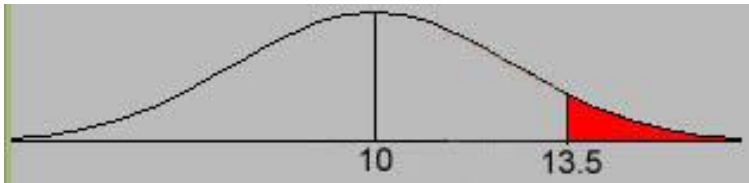








20. What fraction of the scores lie above 13.5 (all scores between 13.5 and 14 would round off to 14)



Mean = 10

S = 2.24

50% of the scores are above the mean, 10.

$$Z = \frac{13.5-10}{2.24} = 1.56 \text{ so } A = 0.441$$

This is a detached region so we subtract:  $.500 - .441 = 0.059$

P(at least 14 heads) = 0.059

$$21. 1 - \frac{1}{k^2} = 1 - \frac{1}{1.75^2} = 1 - \frac{1}{3.06} = 1 - .327 = .673 \text{ or } 67.3\%$$