

Assignment: G9

- (1) In February, the average snow accumulation in Pittsburgh is 10.7 inches with standard deviation 1.6 inches, and this variable is normally distributed.
- What portion of past Februaries recorded a monthly snow accumulation between 9.1 and 12.3 inches?
 - Between which two values can we expect to find 95.4% of past Februaries' snow accumulations?
- (2) Find the areas under the Standard Normal Distribution below:
- To the left of $z = -0.75$
 - To the right of $z = 1.23$
 - Between $z = 1.12$ and 1.18 .
- (3) Find the z -scores that give the areas described below:
- Area to the left is 0.6591
 - Area to the right is 0.0392
 - The area between $z = 0.66$ and a second z -score is 0.1782. Find the second z -score.
(Note: there are two such z -values but only one is precisely in the table given)
- (4) The average time it takes AAA to respond to an emergency call is 25 minutes with standard deviation of 4.5 minutes. If you make an emergency call to AAA, what is the probability that you'll get help within 30 minutes?
- (5) The life span of urban rats is normally distributed. The average life span of an urban rat is 75 months, with standard deviation of 6 months. What is the probability that a random urban rat is older than 7 years old?