

# STANDARD NORMAL TABLE Practice

(1-4) Use the Standard Normal Table to find:

1.  $P(z \leq 1.5) = 0.9332$

2.  $P(z > 0.6) = 0.2743$

3.  $P(z \leq -2.3) = 0.0107$

4.  $P(z > 1.8) = 0.0359$

(5-8) What is the z-score for the following:

5. .2743 - 0.6

6. .1151 - 1.2

7. .0359 - 1.8

8. .8159 0.9

9. A busy time to visit a bank is during its Friday evening rush hours. For these hours, the waiting times at the drive-through window are normally distributed with a mean of 8 minutes and a standard deviation of 2 minutes. You have no more than 11 minutes to do your banking and still make it to your meeting on time. What is the probability that you will be late for the meeting?

$$P(x > 1.5) \quad z = \frac{11 - 8}{2} = 1.5$$

$$P(x \leq 1.5) = 0.9332$$

$$1 - 0.9332 = \boxed{0.0668}$$

10. The guayule plant, which grow in the southwestern United States and in Mexico, is one of several plants that can be used as a source of rubber. In a large group of guayule plants, the heights of the plants are normally distributed with a mean of 12 inches and a standard deviation of 2 inches.

A) What percent of the plants are taller than 16 inches?

$$\boxed{2.5\%}$$

B) What percent of the plants are at most 13 inches?

$$\boxed{0.6915}$$

C) What percent of the plants are between 7 inches and 14 inches?

$$\boxed{83.38}$$

D) What percent of the plants are <sup>at least</sup> 3 inches taller than or at least 3 inches shorter than the mean height?

$$0.0668 + 0.0668$$

$$P(x \leq 9 \text{ or } x > 15)$$

$$= \boxed{0.1336}$$

$$z = \frac{9 - 12}{2} = -1.5$$

$$0.0668$$

$$z = \frac{15 - 12}{2} = 1.5$$

$$1 - 0.9332 = 0.0668$$