

## Practice Problems

Use Table Z to find the area beyond the z scores listed below:

1)  $z = 1.28$ . Area beyond =

2)  $z = .47$ . Area beyond =

3)  $z = 1.45$ . Area beyond =

4)  $z = -.38$ . Area beyond =

5)  $z = -1.85$ . Area beyond =

Use Table Z to find the area between mean and the z scores listed below:

6)  $z = 2.04$  Area between mean and  $z =$

7)  $z = 1.66$  Area between mean and  $z =$

8)  $z = 0$  Area between mean and  $z =$

9)  $z = -.89$  Area between mean and  $z =$

10)  $z = -1.35$  Area between mean and  $z =$

Imagine you just received a grant to study the depth-perception accuracy of 100,000 people. You ask participants to pull two cords and line up two rods, side by side, from a distance of 6 meters. When the participants are done, you measure the distance between the two rods. The results of your study indicate that the average distance between the two rods is 100 millimeters, with a standard deviation of 20 millimeters. Use this mean and standard deviation to answer the questions listed below.

11) What proportion of people set the rods *farther* than 125 millimeters apart?

- 12) What proportion of people set the rods *farther* than 100 millimeters apart?
- 13) What proportion of people set the rods between 90 and 100 millimeters apart?
- 14) What proportion of people set the rods less than 82 millimeters apart?
- 15) What is the 90<sup>th</sup> percentile distance?
- 16) What is the 45<sup>th</sup> percentile distance?