Time Frame: 50 minutes

Subject Matter: Area Under a Normal Curve

TELL ME

Objective: TSWBAT find the area under the normal curve in both tail.

Standards: DA – 5.6

Materials: Transparencies and Worksheets

SHOW ME

Presentation of Information:

The teacher will discuss the following:

Example 1: Find the area to the left of z = -1.24 and to the right of z = 1.67

Solution:

1. Draw the figure.
2. The required area is in the tails of the curve.
3. Since, table E (each student will have a copy) gives the area between z = 0 and z = 1.24, first find that area. Then subtract this value from 0.5000.
4. Find the area between z = 0 and z = 1.67, then subtract this value from 0.5000.
5. Finally, add the area of both ends.

Let Me Try

Find the area under the normal distribution curve.

1. To the left of z = -2.23 and to the right of z = 1.09
2. To the left of z = -1.86 and to the right of z = 0.23
3. To the left of z = -1.64 and to the right of z = 2.31
4. To the left of z = -2.45 and to the right of z = 0.25
5. To the left of z = -1.52 and to the right of z = 1.87

Homework

Find the area under the normal distribution curve.

1. To the left of z = -2.23 and to the right of z = 2.51
2. To the left of z = -1.76 and to the right of z = 1.23
3. To the left of z = -2.34 and to the right of z = 1.76
4. To the left of z = -1.34 and to the right of z = 2.69
5. To the left of z = -1.21 and to the right of z = 1.56