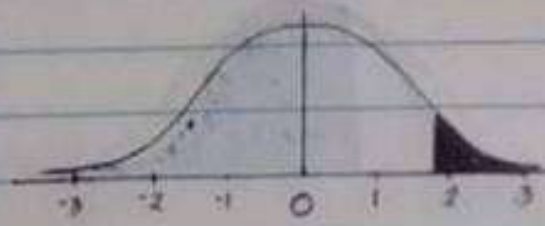
Probabilities and Percentiles Using the Standard Normal Table

Activity 1: FILL ME OUT

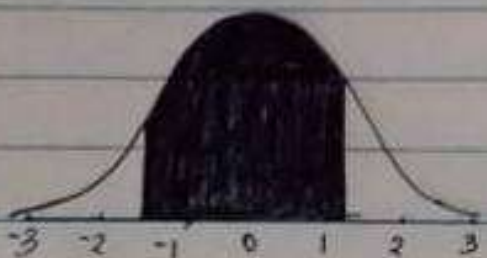
| STEPS | SOLUTION |
|---|---|
| Step 1 - Draw the standard normal curve, locate the z-value(s) and shade the required region |   |
| Step 2 - Consult the z-Table and find the area that corresponds to the given z value(s) | z = 1.91 corresponds to .9719 |
| Step 3 - Examine the graph and use probability notation to form an equation showing the appropriate operation to get the Required area if necessary | The graph suggest subtraction. The required area is equal to 1.0000 - .9719. That is, P(z > 1.91) = 1.0000 - 0.9719 = 0.0281 |
| Step 4 - Make a statement indicating the proportion of the required area | The proportion to the right of z = 1.91 is 0.0281. Hence, the probability is 0.0281 or 2.81% |



ACTIVITY 2: FIND MY PROBABILITY

1) P(-1.5 < z < 1.2)

Step 1:




STEP 2: z = -1.5 corresponds to .4332
z = 1.2 corresponds to .3849

STEP 3: The graph suggest addition. The required area is equal to .4332 + .3849. That is,

P(-1.5 < z < 1.2) = .4332 + .3849
= .8181