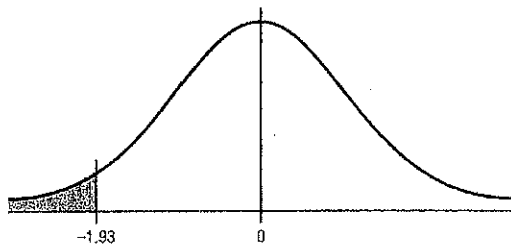


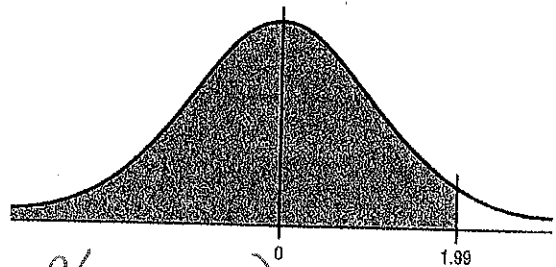
Use your table of Standard Normal Probabilities to find the area of the shaded regions.

1. Find the area to the left of $z = -1.93$.



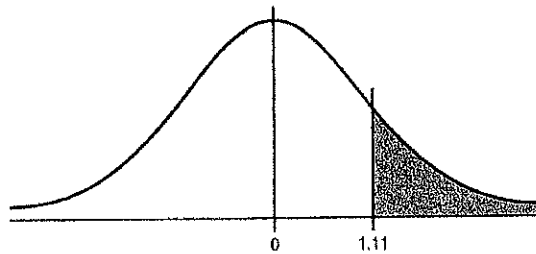
$$P(z \leq -1.93) = .0268$$

2. Find the area to the left of $z = 1.99$.



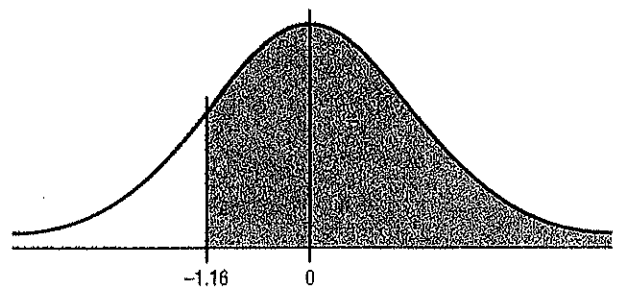
$$P(z \leq 1.99) = .9767$$

3. Find the area to the right of $z = 1.11$.



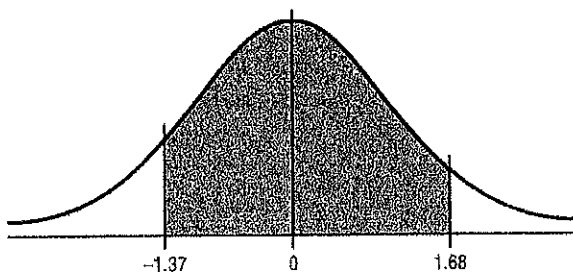
$$P(z \geq 1.11) = .1335$$

4. Find the area to the right of $z = -1.16$.



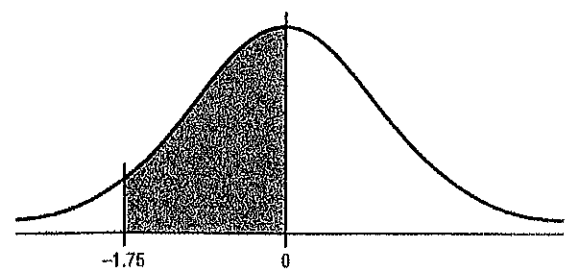
$$P(z \geq -1.16) = .877$$

5. Find the area between $z = +1.68$ and $z = -1.37$.



$$P(-1.37 \leq z < 1.68) = .8682$$

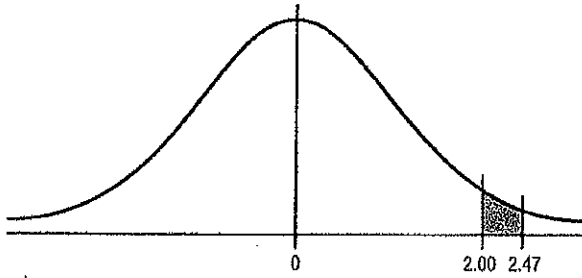
6. Find the area between $z = 0$ and $z = -1.75$.



$$P(-1.75 \leq z \leq 0) = .4599$$

7.

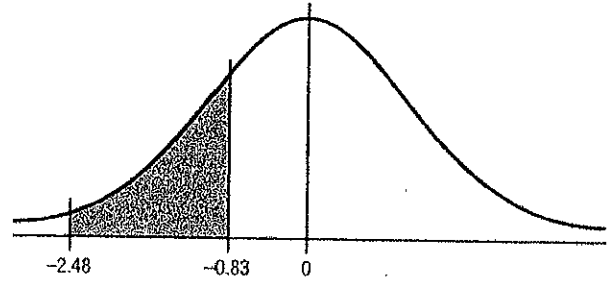
Find the area between $z = 2.00$ and $z = 2.47$.



$$P(2 \leq z < 2.47) = .01599$$

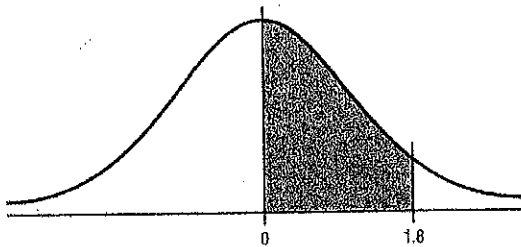
8.

Find the area between $z = -2.48$ and $z = -0.83$.



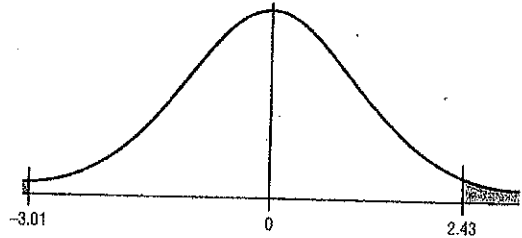
$$P(-2.48 \leq z \leq -0.83) = .1967$$

9. Find the area between $z = 0$ and $z = 1.8$.



$$P(0 \leq z \leq 1.8) = .464$$

10. Find the area to the right of $z = +2.43$ and to the left of $z = -3.01$



$$P(z \leq -3.01) + P(z \geq 2.43) = .0089$$

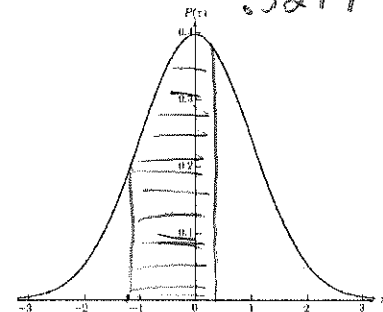
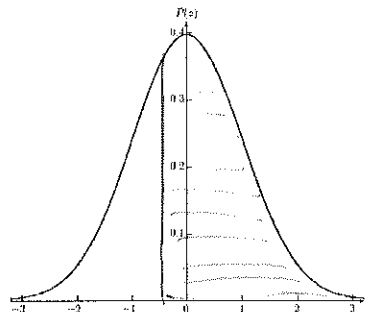
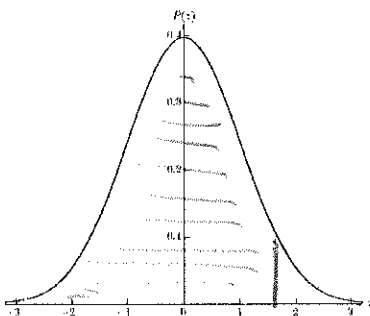
11. Sketch an acute standard normal distribution for each, shade the given area, and find the probability.

a. $P(z < 1.65) = .9505$

b. $P(z > -0.42) = .6628$

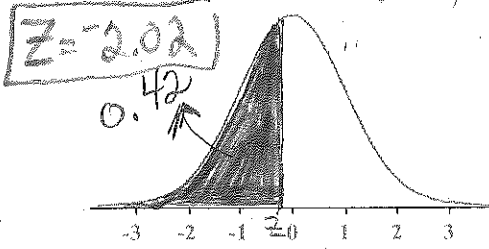
c. $P(-1.2 < z < .35) = .5218$

.5217

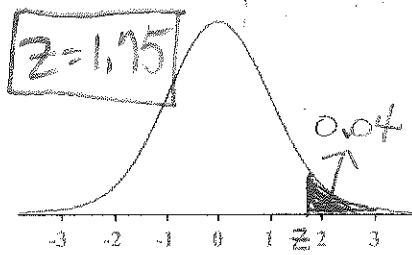


12. Determine the z-score that would result in the given area under the curve. State your answer as an inequality statement.

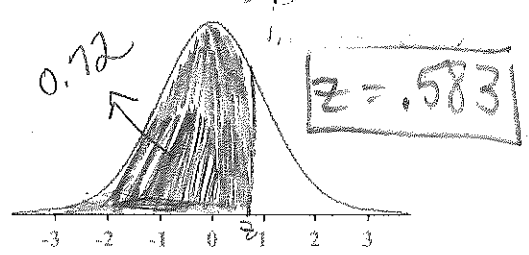
a) $P(Z \leq -2.02) = .42$



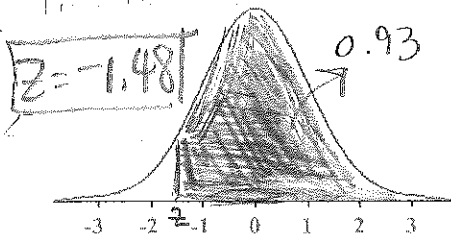
b) $P(Z \geq 1.75) = .04$



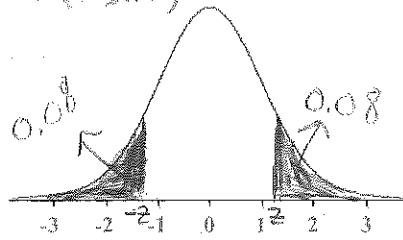
c) $P(Z \leq .583) = .72$



d) $P(Z \geq -1.48) = .93$

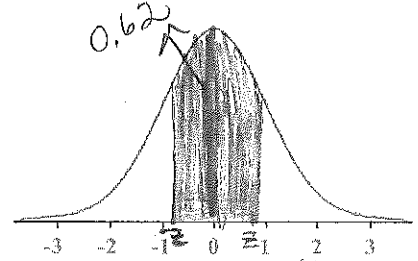


e) $P(Z \leq -1.41) = .08$
 $P(Z \geq 1.41) = .08$



$z = 1.41$
 $-z = -1.41$

f) $P(Z \leq .818) = .81$



symmetry!!
 $.31 + .31$
 $.5 + .31 = .81$

$z = .818$
 $-z = -.818$