

Name: \_\_\_\_\_

### Quiz

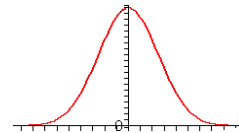
1. Compute the probability of getting a sum of 3 or more in throwing 2 dice.

2. A (hypothetical) frequency distribution for the age of people in a survey, the categories have the probabilities as shown. One number is missing – what is the missing number?

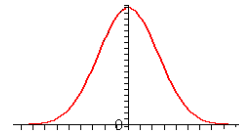
Category	Probability
0 – 18	0.20
19-40	0.30
41-65	
65 and older	0.15

3. If  $z$  has a standard normal distribution  $N(0,1)$ , use the table on the reverse to find:

$$P(z > 1.2)$$



$$P(-1 < z < 2)$$



3. Find the appropriate z-score of a variable  $X$  with mean 8 and standard deviation 4 if  $X = 14$ .
4. Each score listed below comes from a sample with the indicated mean and standard deviation. Convert each one to a z-score and find the indicated probability using the table on the reverse side.
- a) Normal distribution  $N(6,4)$ , .i.e. mean 6, standard deviation 4). Find  $P(x < 9)$
- b) Normal distribution  $N(4, 1.5)$ , i.e. mean 4, standard deviation 1.5. Find  $P(3 < X < 5)$