Honors Algebra 2	Unit 8 - Stat	ts 8.3 – Standard Normal Cu	ırve - Notes
Name:		Date:	
Normal Curve:			
1.	2		
<ul> <li>A normal distribution has a mean of 18 and a standard deviation of 3. Find the probability that a randomly selected x-value from the given distribution is in the interval.</li> <li>a)</li> </ul>			
c)		d)	

- 4. The heights of 3000 women at a particular college are normally distributed with a mean of 65 inches and a standard deviation of 2.5 inches
  - a) About what percent of college women have heights below 70 inches?
  - b) About how many college women have heights between 60 inches and 65 inches?

5. A particular leg bone for dinosaur fossils has a mean length of 5 feet with standard deviation of 3 inches. What is the probability that a leg bone is less than 62 inches?

6. The weight of chocolate bars from a particular chocolate factory has a mean of 8 ounces with standard deviation of .1 ounce. What is the probability that a randomly selected bar is between 7.85 and 8.15 ounces?

- 7. The grades on a statistics midterm exam were normally distributed with a mean of 72 and a standard deviation of 8.
  - a. What is the proportion of students received a B grade.
  - b. What is the probability that a randomly selected student received a 78 or above?
  - c. What is the percent of students that failed the exam?