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## Assignment Normal Distribution

Date $\qquad$

1) The scores on a test administered to prospective employees are normally distributed with amean of 100 and a standard deviation of 15 (use this infornation for 1-6). About what percent of the scores are between 70 and 130 ?
2) About what percent of the scores are between 85 and 130 ?
3) About what percent of the scores are over 115 ?

4) About what percent of the scores are lower than 85 or higher than 115 ?
5) If 80 people take the test, how many would you expect to score higher than 130 ?
6) If 75 people take the test, how many would you expect to score lower than 85 ?
7) The daily July surface temperature of a lake at a resort has a mean of $82^{\circ}$ and a standard deviation of 4.28 . If you prefer to swim when the temperature is at least $77.8^{\circ}$, about what percent of the days does the temperature meet your preference?
8) A set of data has a normal distribution with a mean of 5.1 and a standard deviation of 0.9 . Find the percent of data within each interval (use for 8-10). What percent from 4.2 to 5.1 ?
9) What percent from 6.0 to 6.9
10) What percent greater than 6.9 ?

Answers to HW 28: Normal Distribution

1) $95 \%$
2) 2
3) $13.5 \%$
4) $81.5 \%$
5) $16 \%$
6) $32 \%$
7) 12
8) $2.5 \%$
9) $84 \%$
10) $34 \%$
