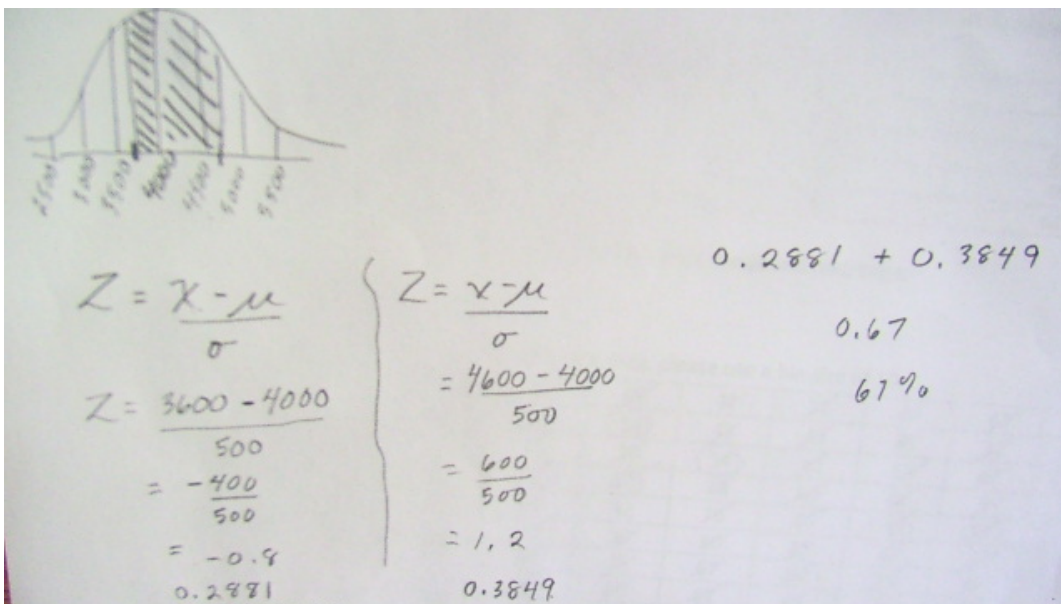



The attendance for a week at the local theatre is normally distributed, with a mean of 4000 and a standard deviation of 500. What percent of attendance figures fall between 3600 and 4600 people?



$z = -0.9$ $z = 1.2$
 0.2881 0.3849

At a high school, the average grade for English is 64%, with a standard deviation of 10. What percent of students earn a grade between 73 and 85?



$Z = \frac{x - \mu}{\sigma}$ $= \frac{73 - 64}{10}$ $= \frac{9}{10}$ $= 0.9$ 0.3159	$Z = \frac{x - \mu}{\sigma}$ $= \frac{85 - 64}{10}$ $= \frac{21}{10}$ $= 2.1$ 0.4821	0.4821 $- 0.3159$ <hr style="width: 50%; margin: 0 auto;"/> 0.1662 16.6%
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