More Practice with Z-scores and Normal Curves **Name**_____.

It is found that the distribution of salaries in a certain industry is approximately Normal with a mean of $46,000 and a standard deviation of $2,330. Draw a large picture and label it out to +/- 3 standard deviations to assist you.

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1. Find the probability that an employee selected at random will have a salary in the indicated range.

a) less than $46,000

b) less than $43,670

c) less than $41,340

d) greater than $52,990

e) greater than $43,670

f) greater than $41,340

g) between $43,670 and $48,330

h) between $41,340 and $50,660

i) between $41,340 and $48,330

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2. Find the probability that an employee selected at random will have a salary in the indicated range.

a) less than $40,000

b) less than $50,000

c) greater than $45,000

(……continued from previous page. Draw a small picture for each of these 3 parts to accompany your work.)

d) greater than $51,000

e) between $41,000 and $45,000

f) between $43,000 and $49,000

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3. What salary would fall at the following percentiles? Round to nearest dollar. Draw a picture for each part to accompany your work.

a) 50^{th}

b) 80^{th}

c) 98^{th}

d) 10^{th}