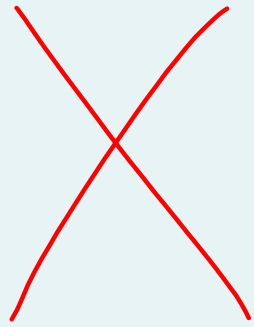


Mon	Tue	Wed	Thu	Fri
April 4 review #1	April 5 ch.14 group quiz	April 6 review #2	April 7 ch 14 Test	April 8 SBAC practice
SBAC English testing for 11th grade				

BRING A CHARGED CHROMEBOOK AND ARRIVE ON TIME!

Mon	Tue	Wed	Thu	Fri
April 11	April 12	April 13	April 14	NO SCHOOL
SBAC math testing for 11th grade				

Ch.14 review sheet #1

NAME:

check answers for reminder and #1-2:

4.01 10.56 34 47.5 54.67 68 68 95 95 95 95.99 97.10 99.7 99.7 99.7

Reminder from 14.6 notes, Normal Distribution:

The Empirical Rule states that about **68** % of the data is within **one** standard deviation of the mean.

95 % of the data is within **two** standard deviations of the mean.

97.7 % of the data is within **three** standard deviations of the mean.

1. The **mean** of a set of normally distributed data is **75** and the **standard deviation** is **8**. Sketch a graph of the situation.

2. The **mean** of a and the **standard deviation** of a situation.



State answer to part a.

a. What percent of the data is between the mean and one standard deviation below the mean?

b. What percent of the data is between the mean and one standard deviation above the mean?

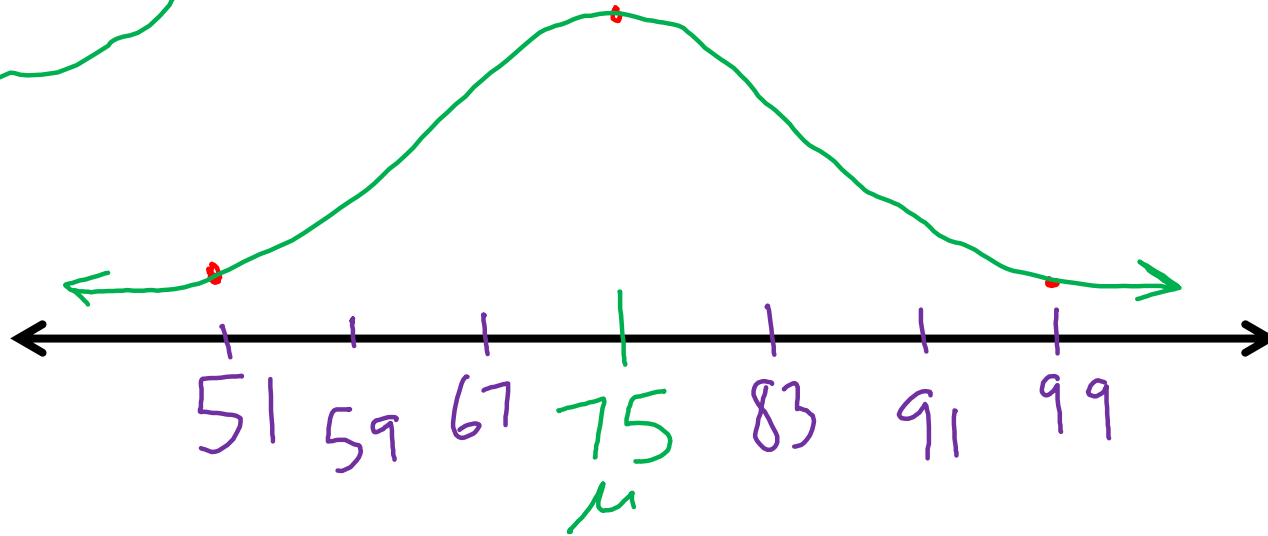
Refer to the graph for part b.

Ch.14 review#1

1. The **mean** of a set of normally distributed data is **75** and the **standard deviation is 8**. Sketch a graph of the situation.

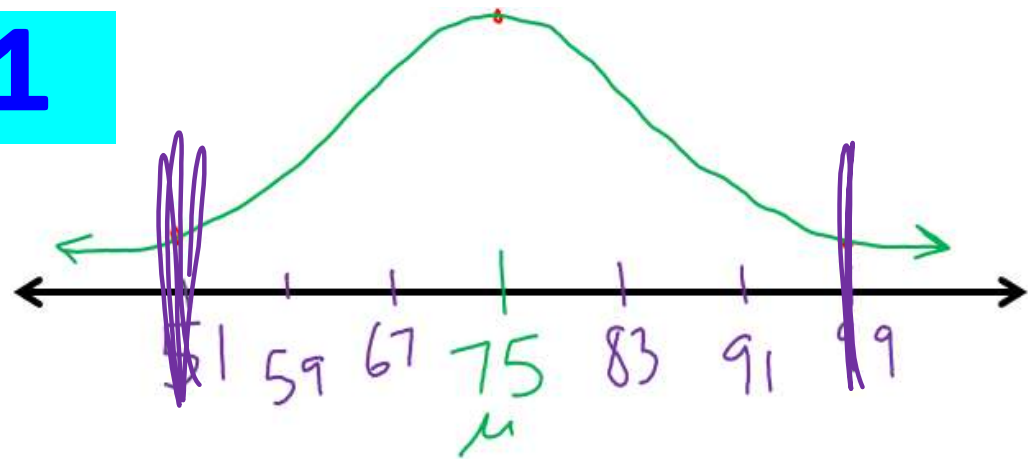
$$\mu = 75$$

$$\sigma = 8$$



sketch:
 $\mu \pm 1\sigma$
 $\mu \pm 2\sigma$
 $\mu \pm 3\sigma$

Ch.14 review#1



a. What percent of the data is in the interval **67-83**? *Just write your answer!*

68%

b. What percent of the data is in the interval **59-91**? *Just write your answer!*

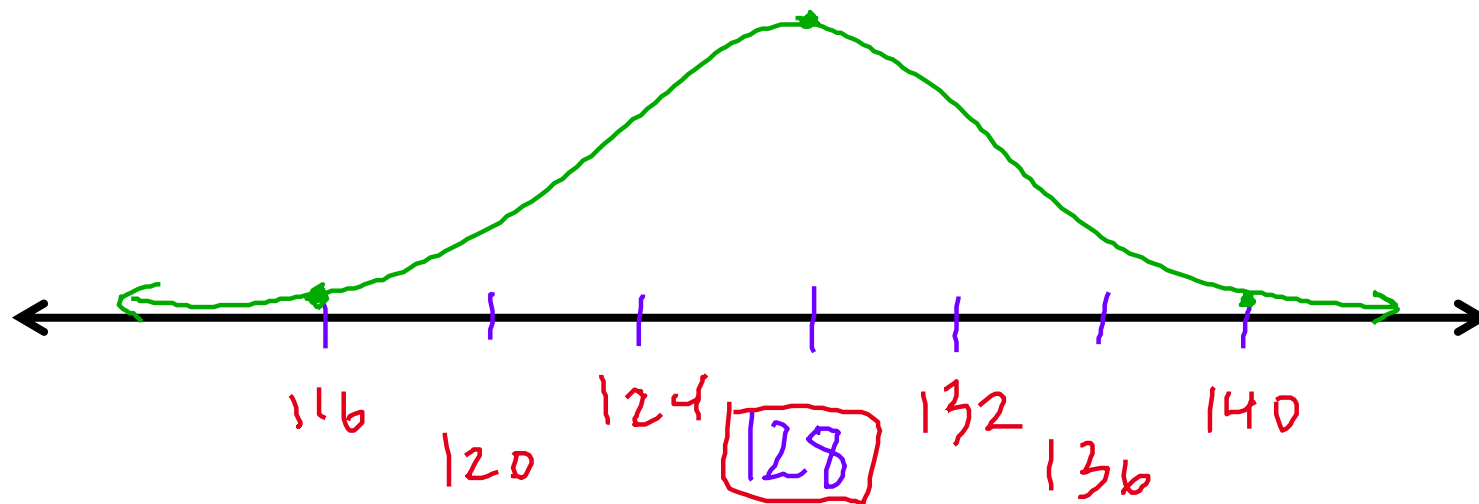
95%

c. What percent of the data is in the interval **51-99**? *Just write your answer!*

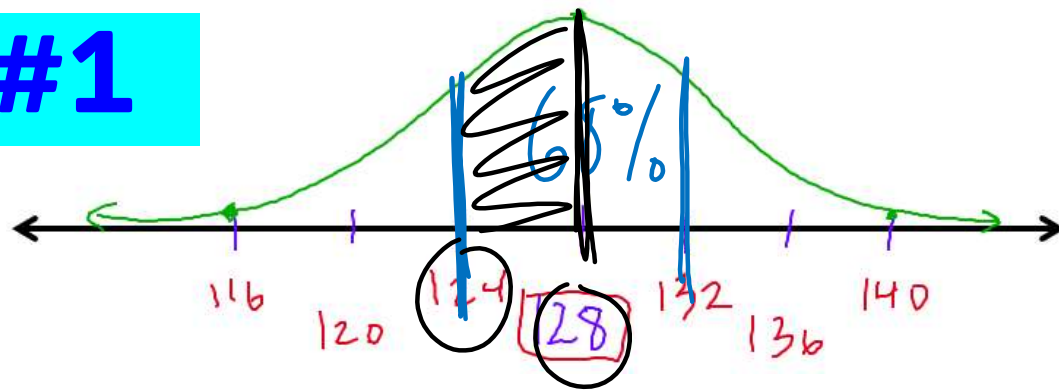
99.7%

Ch.14 review#1

2. The **mean** of a set of normally distributed data is **128** and the **standard deviation is 4**. Sketch a graph of the situation.



Ch.14 review#1



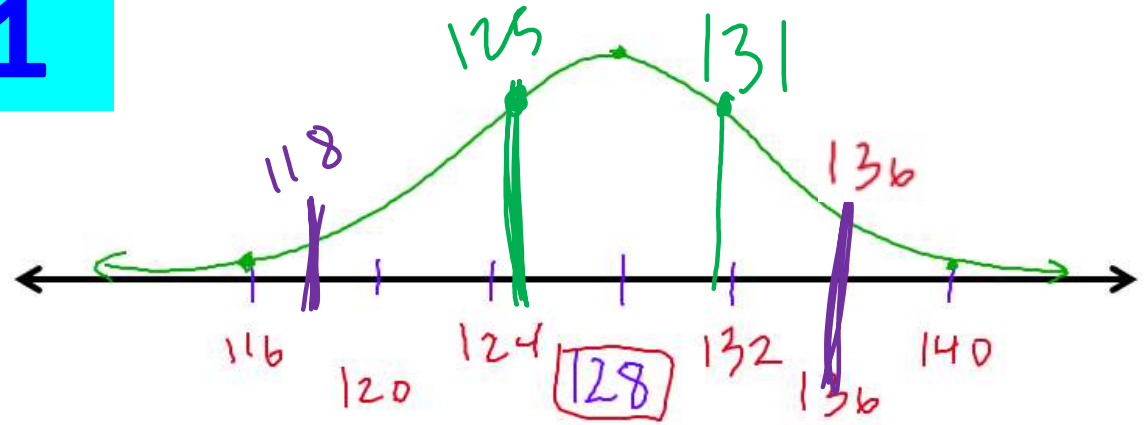
a. What percent of the data is in the interval **116-140**? *Just write your answer!* $\pm 3\sigma$ 99.7%

b. What percent of the data is in the interval **120-136**? *Just write your answer!* $\pm 2\sigma$ 95%

c. What percent of the data is in the interval **128-136**? *Show work!* $\frac{95\%}{2} = \text{span style="border: 1px solid black; padding: 2px;">47.5\%$

d. What percent of the data is in the interval **124-128**? *Show work!* $\frac{68}{2} = \text{span style="border: 1px solid black; padding: 2px;">34\%$

Ch.14 review#1



e. What percent of the data is in the interval **125-131**?

Write the calculator command and your answer.

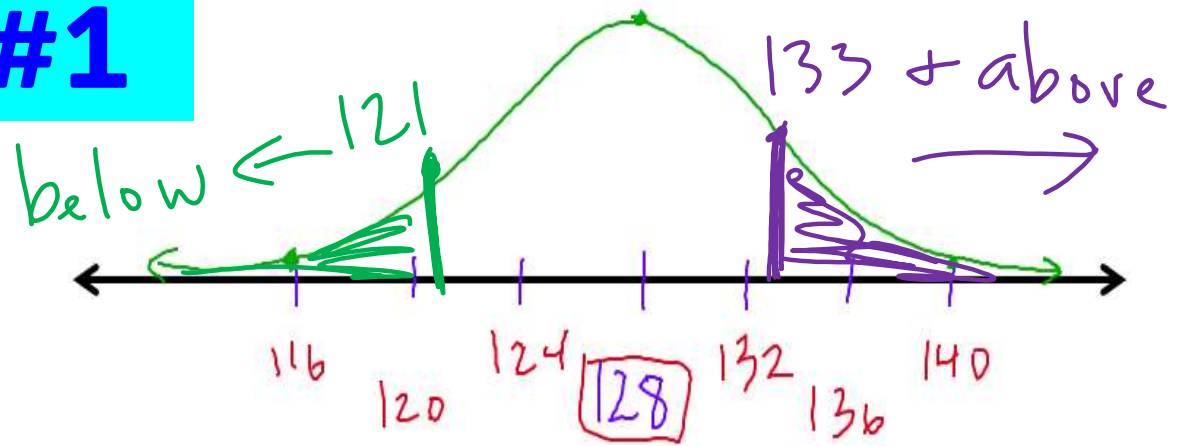
$$\text{normalcdf}(125, 131, 128, 4) \approx \boxed{54.67\%}$$

f. What percent of the data is in the interval **118-136**?

Write the calculator command and your answer.

$$\text{normalcdf}(118, 136, 128, 4) \approx \boxed{97.10\%}$$

Ch.14 review#1



g. What percent of the data is **above 133**?

Write the calculator command and your answer.

$$\text{normalcdf}(133, 1000, 128, 4) \approx \boxed{10.56\%}$$

h. What percent of the data is **below 121**?

Write the calculator command and your answer.

$$\text{normalcdf}(-1000, 121, 128, 4) \approx \boxed{4.01\%}$$

i. What percent of the data is **above 121**?

*No calculator command,
show work using answer from part h!*

$$100\% - 4.01\% = \boxed{95.99\%}$$

