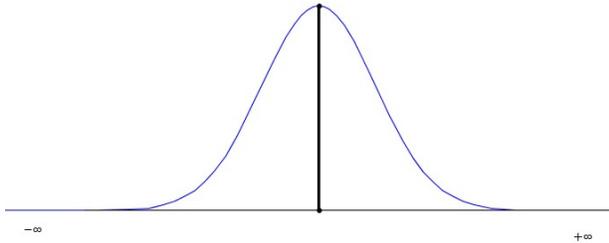


GUIDED NOTES Applications of Normal Curves 11-12-17

Residents of a small town have savings which are normally distributed with a mean of \$4000 and a standard deviation of \$800.

1. What is the percentage of townspeople have savings greater than \$4200? _____

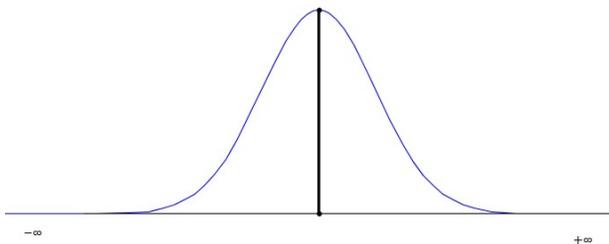
2. Shade and label the related normal curve (label EVERYTHING)



3. State the related Z score from the CHART $z =$ _____

4. A townspeople is chosen at random. What is the probability that townspeople has savings between \$3300 and \$5000? _____

5. Shade and label the related normal curve (label EVERYTHING)

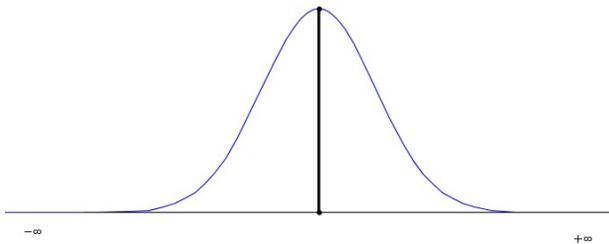


6. State the related Z scores $z =$ _____ & $z =$ _____

7. The percentage of townspeople with savings less than d dollars is 93.04%. Find the value of d .

$d =$ _____

8. Shade and label the related normal curve (label EVERYTHING)



9. State the related Z score from the CHART $z =$ _____

The height of a plant is normally distributed and typically is 18.6 inches with a standard deviation of 1.5 inches:

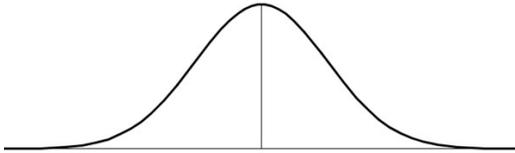
10. You randomly selected a plant in the top 20% of all plants of this type

What is the probability statement for this scenario? _____

State the related z score = _____

What is the associated height with this problem? _____

Sketch the scenario on the provided normal curve (label EVERYTHING)



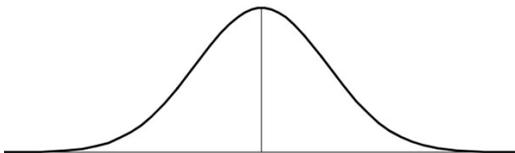
11. You randomly selected a plant in the bottom 18% of all plants of this type

What is the probability statement for this scenario? _____

State the related z score = _____

What is the associated height with this problem? _____

Sketch the scenario on the provided normal curve (label EVERYTHING)



12. You randomly selected a plant that is between 17.5 inches and 18 inches of all plants of this type

What is the probability statement for this scenario? _____

State the related z score = _____

What is the associated probability with this problem? _____

Sketch the scenario on the provided normal curve (label EVERYTHING)

