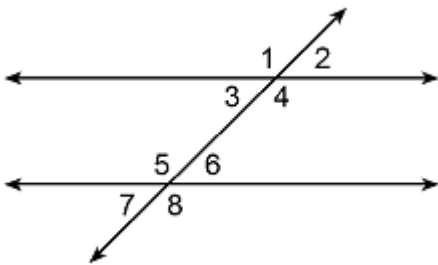


Directions: Show all work.

1. Solve the equation given:

$$-2(3x - 1) = 4x - 8$$

2. Two angles are supplementary. Angle 1 is represented by $(4x - 15)$ and angle 2 is represented by $(x + 35)$. Determine the measure of the larger angle.



3. Identify a pair of angles that satisfy each of the following special relationships.

Corresponding \angle _____ and \angle _____

Vertical \angle _____ and \angle _____

Alternate Interior \angle _____ and \angle _____

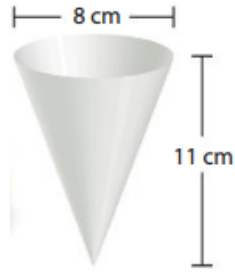
Alternate Exterior \angle _____ and \angle _____

Supplementary \angle _____ and \angle _____

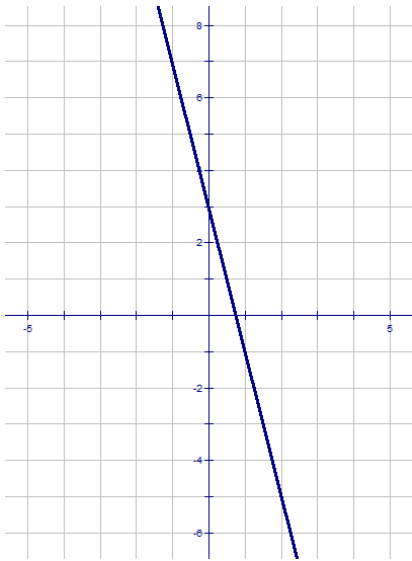
4. In 1995, the population of a certain town is 4,500 people. From 1995 to 2000, the population increased by 15%. From 2000 to 2005, the population decreased by 4%. What was the town's population in 2005? Show your work.

5. Dylan took his friend out to eat. The total bill came to \$67.75. Sales tax was 8.625%, and then they left a 20% tip. Determine the total amount they will pay.

6. Abby is selling lemonade in paper cups with the dimensions shown below. Determine the volume of each cup *to the nearest tenth*. ($V = \frac{1}{3}\pi r^2 h$)



7.



Determine the slope (m) of the line. _____

Determine the y-intercept (b). _____

Write the linear equation. _____

8. Solve and Graph the inequality shown.

$$7x - 11 > 4x + 7$$



9. What is $(3x - 7)$ subtracted from $(-8x - 9)$?