Day 4

Algebra II Name_____

#8 Date_____ Per _____

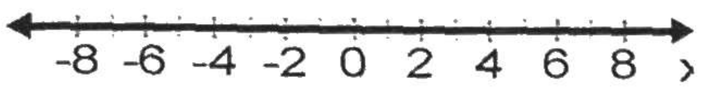
Solve & Graph:

1. $4(2-6x)=6(2-4x)$

$8-24x=12-24x$

$8=12$

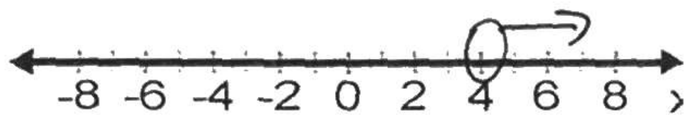
$\emptyset$



2. $5x-12>8$

$5x>20$

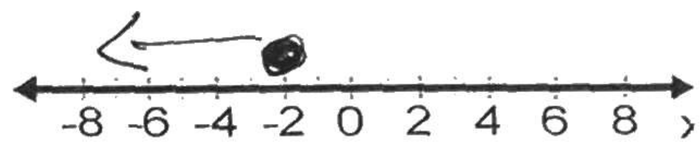
$x>4$



3. $23+3x\le 15-x$

$4x\le -8$

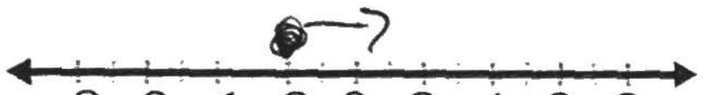
$x\le -2$



4. $-3x+8\le 14$

$-3x\le 6$

$x\ge -2$

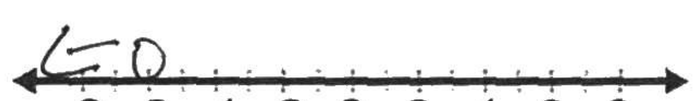


5. $3(x-1)>7(x+3)$

$3x-3>7x+21$

$-4x>24$

$x<-6$

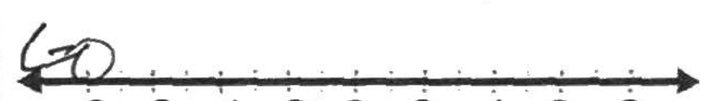


6. $5(x-2)\ge 4(2x+3)+2$

$5x-10\ge 8x+12+2$

$-3x\ge 24$

$x\le -8$



Solve each proportion:

7. $\frac{4}{14}=\frac{24}{x}$

$4x=336$

$x=84$

8. $\frac{\frac{1}{3}}{3}=\frac{6}{x}$

$\frac{1}{3}x=18$

$x=54$

9. $\frac{9+m}{5}=\frac{15}{4}$

$36+4m=75$

$4m=39$

$m=9\frac{3}{4}$

10. $\frac{2}{x-5}=\frac{6}{9}$

$18=6x-30$

$48=6x$

$8=x$

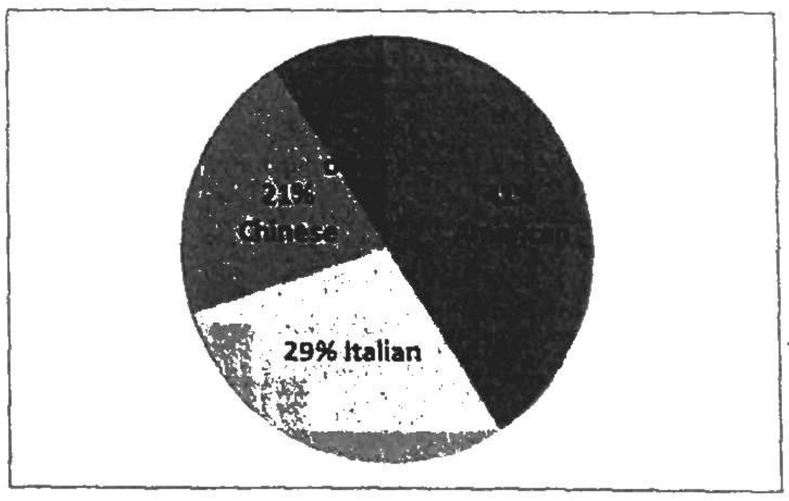
11. A model of a building has a ratio of 3 cm to every 2 feet of the actual building. How tall is the model if the building is 74 feet tall?

$\frac{3}{2}=\frac{x}{74}$

$2x=222$

$x=111$

12. A sample of students was asked what type of restaurant they visit most often. If 126 students chose Chinese restaurants, how many students were polled?



x = total # of students

$.21x=126$

$.21x=126$

$x=600$