## UNIT 6 STUDY GUIDE

Solve each equation. Show your work.

1) $m-16=-4$
2) $k+31=17$

Find the solution for question \#3 and \#4. Show your work. Check your answer.
3) Jamar earned $\$ 2,500$ from his summer job at the grocery store. This is $\$ 350$ more than twice what his friend Todd earned. How much did Todd earn from his summer job?
4) The perimeter of a rectangle is 48 centimeters. If the length of one of the sides is 16 centimeters, what is the width of the rectangle?

Solve each equation. Show your work.
5) $9 x=72$
6) $-39.75=7.5 m$
7) $4.8 x+7.48=-5$
8) $\frac{8}{11} x=-\frac{4}{11}$
9) $\quad-0.5(x-4.2)=6.4$
10) $-5+18 a=-77$
11.) $12=3.1 y-59.3$
12) $\frac{x}{5}-9=-4$

Solve each inequality. Show your work. Graph the solution on a number line.
13) $x+3>13$

15) $9 a \geq-36$

17) $\frac{w}{-2}<8$

14) $n-8 \leq 4$

16) $-6 m<-24$

18) $\frac{b}{4}+6 \leq 3$


Find the solution for question \#19 and \#20. Show your work. Check your answer.
19) The length of each side of a regular pentagon is increased by 8 inches, so the perimeter is now 65 inches. What is the original length of each side of the regular pentagon?
20) $-7=1+\frac{2}{3} n$

