Algebra I Wkst #6 **Name_____**
4-2 Word Problems **Date_____Period____**

****Equations with variables on both sides:**

1. A passenger train travels at 60 mi/hr and a freight train travels at 40 mi/hr. It takes the passenger train 1.5 hr less time to cover the same distance as the freight train. How long does it take each train to make the trip?

2. Hans needs to rent a moving truck. Suppose Company A charges a rate of $40/d and Company B charges a $60 deposit plus $20/d. How many days must Hans rent the moving truck to justify using Company B?

3. May rides her bike the same distance that Leah walks. May rides her bike 10km/hr faster than Leah walks. If it takes May 1 hr and Leah 3 hr, how fast does each travel?

4. Mari and Brice are picking oranges. Mari has picked 2 boxes of oranges and is picking 5 boxes per hour. Brice has picked 5 boxes of oranges and is picking at 3 boxes per hour. In how many hours will they have picked the same number of boxes?

5. Lois rides her bike to visit a friend. She travels at 10mi/hr. While she's there, it starts to rain. Her friend drives her home in a car traveling at 25 mi/hr. It takes Lois 1.5 hr longer to go to her friend's than it does to return home. How many hours did it take Lois to ride to her friend's house?

6. Suppose a video store charges non-members $4 to rent a video. A membership costs $21 and then videos cost only $2.50 to rent. How many videos would you need to rent in order to justify a membership?

7. Suppose your club is selling candles to raise money. It costs $100 to rent a spot to sell candles. If the candles cost your club $1 each and are being sold for $5 each, how many candles must be sold to equal the expense?