The Ever Popular Word Problem!!

Strategy:

1. Read the problem.
2. Draw a picture if it helps.
3. Make a good “Let Statement”.
4. Translate the problem into Math.
5. Solve for the unknown or solve the system of equations.

Example:

Cade traveled 48 miles at a certain speed. If he had gone 4 mph faster, the trip would have taken 1 hr less. Find Cade’s average speed.

Solution:

Let r = Cade’s average speed.

Let t = the times it took

Multiply both sides by

So

Ex: A Flying Nun flies 5 mph faster than your mom can fly her model air plane. If the flying nun goes 200 mi in 3 hrs less time than it takes your mom to fly her model plane 280 mi, find the speed of each. Click [here](http://www.youtube.com/watch?v=SnhgpVb-u5s) for a link to a video of The Flying Nun.

Solution:

Let x = Your mom’s plane’s speed.

Let y = Flying- nun’s speed =

Let t = time it takes for your mom to fly plane 280 mi.

Multiply both sides by x:

Since your mom’s plane wont fly backward, it must cruise at 35mph (it’s a miracle she has not crashed and burned), so the nun flies at 40 mph.

In this section we will also practice solving equations for a variable that seems hard to solve for.



Ex: Solve

Solution:









Ex: Solve the following:

1. , for
2. , for
3. , for
4. , for
5. , for
6. , for
7. , for