11.5 Rational Word Problems

Guidelines:

1. Read the problem thoroughly
2. Circle all important information
3. Relate the information
4. Define the variables
5. Write the equation
6. Solve
7. Cam can stuff envelopes three times as fast as his friend Jack. They have to stuff 5000 envelopes for a fundraiser. Working together, Cam and Jack can complete the job in four hours. How long would it take each of them working alone?

Relate:

Define:

Write:

1. Suppose Adrian can weed a garden twice as fast as Declan. Together they can weed the garden in three hours. How long would it take each of them working alone?
2. Sarah and Isabella have volunteered to contact every member of the freshman class by phone the inform them of an upcoming event. Isabella can complete the calls in 6 days if she works alone. Sarah can complete them in four days. How long will they take to complete the calls working together?

Practice:

1. Anabel can paint her room in four hours. Samantha can paint the same room in eight hours. How long does it take for both Anabel and Samantha to paint the room if they are working together?

2. Katherine can paint a fence in 8 hours. Devin can do it in 4 hours. How long will it take them to do the job if they work together?

3. Chase takes 2 hours to wash 500 dishes and Patrick takes 3 hours to wash 450 dishes. How long will they take, working together, to wash 1000 dishes?