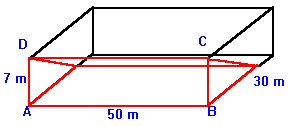
**Jumpstart Math Word Problem Challenges (Just pick ONE)**

1. **Suppose you/re on a game show, and you're given the choice of three doors: Behind one door is a car; behind the other, goats. You pick a door, say No. 1, and the host, who knows what's behind the doors, opens another door, say No. 3, which has a goat. He then says to you, "Do you want to pick door No. 2?" Is it to your advantage to switch your choice? What are the probabilities?**
2. **A chemist has a 20% and a 40% acid solutions. What amount of each solution should be used in order to make 300 ml of a 28% acid solution?** <http://www.analyzemath.com/percent/percent_math_problems.html>
3. **Trigonometry: A swimming poool is 30 m wide, 50 m long and 7 m deep. After an earthquake, the pool is tilted along one edge (AB) and the water completely covers side ABCD. At this point, 3/4 of the base is covered by water.**  
   **What was the water level before the earthquake?**  
     
   <http://www.mystfx.ca/special/mathproblems/>

BONUS

**Three students have to write a make- up test. Mark scored 24/60 on his first test and 32/40 on his make up test. Jake scored 35/70 on his first test and 54/60 on his makeup test. Marilyn scored 27/90 on her first test and 45/50 on her second test.**

**A) Which student improved the most and by what percentage?**

**B) If the teacher gives each student a final grade using 70% of the makeup test mark and 30% of the first test mark, what mark would each student receive? Who did the best overall?**

<http://www.mystfx.ca/special/mathproblems/grade8.html>