

S, v, a practice

Name: \_\_\_\_\_

Show ALL of your work. Be sure to write down all the information given. Draw a square around your answer.

1. If you want to hit your favorite teacher with a water balloon that you drop from the top of the gym but not kill them you need to know how fast it will be going when it strikes them. The gym is 23m high. What will be the balloons speed when it bops them on the head?
2. Mr. Gray has a large truck. It can go from 5m/s to 20m/s in 15s. What is his trucks acceleration? Would you consider that fast?
3. I want to drive to Arkansas over the long weekend. It is 325 miles to Bentonville, AR. I plan to do the trip in 5.2 hours. What will my velocity need to be?
4. If I drop a penny from the top of the grand canyon and find it takes 1.5 minutes for it to hit the ground below. How deep is the canyon?
5. Provide 3 different examples of velocities.  
a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_  
\_\_\_\_\_
6. Gray and Hemmingsen take a trip back and forth to Casey's. It took them 15 minutes. They had an average speed of 35mi/hr. How far is it to Casey's?

7. If a rock is thrown up at 45m/s, how long does it take for the rock to reach a velocity of 0m/s?
  
8. You drive down the road and see a deer in the road. You can slow down (accelerate backwards) at 4m/s. How long will it take you to stop if you are going 40m/s?
  
9. What is the ONLY difference between *velocity* and *speed*?