

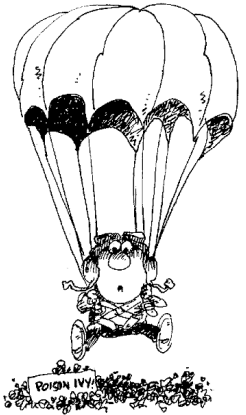
Rate of Change

Using your ESRT please answer the following questions. Show all work!

1. A hot air balloon rose from a height of 100 m to 400 m in 3 minutes. What was the balloon's rate of change?



2. A glacier advanced down a mountain from an elevation of 2010 m to 1780 m in 5 years. What was the glacier's rate of change?



3. A sky diver falls 100 meters in 10 seconds. Calculate the rate of change. Hint: He starts at 0 when he jumps out of the plane.



4. A missile flies 20 miles in 10 minutes. Calculate the missile's rate of change.

5. A student's grade goes from a 95 to a 60 in 3 weeks because they didn't do their homework (this can happen to all of you in this class right now if you slack off!) Calculate the student's rate of grade change.

6. A patient's systolic blood pressure drops from 210 mm/Hg to 100 mm/Hg in 10 minutes after they took nitroglycerin. Calculate the patient's rate of change in blood pressure.

