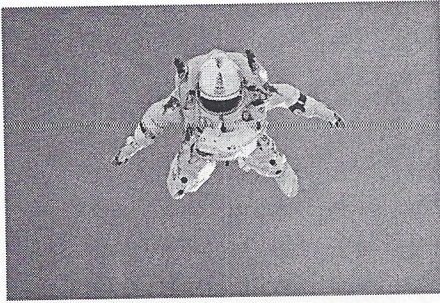


Name \_\_\_\_\_

Period \_\_\_\_\_

# Distance, Rate, and Time

- 1) Felix Baumgartner, 65, broke the sound barrier in a record parachute jump Oct. 14 when he jumped from a capsule attached to a massive balloon at 128,100 feet, or roughly 24 miles, above Earth. This image from mission control shows the Austria native jumping over Roswell, NM.



Find the average rate of speed he was traveling given it took him 4 minutes and 20 seconds to complete the jump.

Formula  $D = R \cdot T$

His ascent in an air balloon took  $2 \frac{1}{2}$  hours. At what rate did he ascend to reach his starting point for the jump?

- 2) Daredevil tightrope walker, Nik Wallenda, 33, a seventh-generation member of the famed "Flying Wallendas" family of circus performers, crosses Niagara Falls on a wire, June 15, 2012. He completed the first walk across Niagara Falls in over a century, braving winds and heavy spray in his historic feat. Tens of thousands of spectators were packed on the US and Canadian sides of the falls to watch Wallenda complete the stunt. Wallenda's walk on a cable suspended 196 feet (60 meters) up over a never-before-traversed rim of the biggest waterfall in North America took 30 minutes, considerably less than expected. He walked a 2-inch (5 cm) cable strung 1,800 feet (550 meters) across Niagara Falls gorge.



At what RATE did he travel across?

- 3) Daredevil Robbie Knieval, son of legendary stuntman Evel Knieval, is airborne above the Grand Canyon, AZ, during a 1999 successful world-record jump. Knieval crashed after his landing and sustained minor injuries, but talked to the crowd before being flown by helicopter to a Las Vegas hospital.



If he traveled at 38.5 feet per second and he was Airborne for 6 seconds, what was the distance of his jump?

- 4) Professional Japanese skier Yuichiro Miura comes down the slope of Mount Everest from an altitude of 26,000 feet to ski and slide approximately 8,000 vertical feet. With a fighter pilot's helmet complete with a transceiver on his head, skis on his feet, oxygen tanks and a parachute strapped to his back, Miura launched himself down Everest's South Col. Miura skied 6,600 feet and fell 1,320 feet down the steep Lhatse face from the Yellow Band just below the South Col. When he lost his footing he fell and came to a full stop just 250 feet from the edge of a deep crevasse.



If he skied from 26,000 feet down a distance of 6,600 feet (Everest's South Col) at an average rate of 72 miles per hour, how long did it take him to complete the run?