Physics Interactive Quiz :

|  | \# | 1 | question | Answer |  |  | 0 | <--score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | 1 | 10 | $\mathrm{m} / \mathrm{s}$ is the muzzle velocity of a projectile shot at $30^{\circ}$. Find the range. |  | 8.8367 | 100 | 0 |  |
| \# | 2 | 10 | Find the time in the air |  | 1.0204 | 100 | 0 |  |
| \# | 3 | 50 | meters is the height of a cliff a ball is kicked from horizontally at $5 \mathrm{~m} / \mathrm{s}$. Find the time in the air |  | 3.1944 | 100 | 0 |  |
| \# | 4 | 50 | Find the distance from the base of the cliff the ball lands |  | 15.972 | 100 | 0 |  |
| \# | 5 | 50 | Find the landing velocity |  | 5.9333 | 100 | 0 |  |
| \# | 6 | 3 | $\mathrm{m} / \mathrm{s}$ is the initial downward velocity of a ball thrown from the same cliff. Find final vertical velocity |  | 31.448 | 100 | 0 |  |
| \# | 7 | 1.5 | $\mathrm{m} / \mathrm{s}$ is the downstream velocity of a stream a swimmer crosses at $2 \mathrm{~m} / \mathrm{s}$. Find her resultant angle. |  | 36.869 | 100 | 0 |  |
| \# | 8 | 1.5 | Find her resultant velocity |  | 2.5 | 100 | 0 |  |
| \# | 9 | 1.5 | If the stream were 200 meters across, find the time it takes her to cross the stream. |  | 100 | 100 | 0 |  |
| \# | 10 | 1.5 | How far downstream does she land? |  | 150 | 100 | 0 |  |

Extra Credit: The Vx graph in your projectile motion labs had a non-linear slope. Explain why...

