A Physics Interactive MidTerm Exam page one

|  | \# | 4 | question | Answer | 0 | <--score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | 1 | 40 | meters is the height of a cliff. A ball dropped from this cliff would take how long to fall? |  | 0 |  |
| \# | 2 | 40 | How fast would the ball be going by then? |  | 0 |  |
| \# | 3 | 40 | $\mathrm{m} / \mathrm{s}$ is the velocity of a car that hits a tree. If it takes 0.8 meters to stop, find acceleration in $\mathrm{m} / \mathrm{s} 2$ |  | 0 |  |
| \# | 4 | 160 | $\mathrm{m} / \mathrm{s}$ is the muzzle velocity of a cannon that shoots at 30 degrees. Find the landing angle |  | 0 |  |
| \# | 5 | 160 | find the range |  | 0 |  |
| \# | 6 | 4 | kg is the mass of a fancart that accelerates at $0.5 \mathrm{~m} / \mathrm{ss}$. FInd the force from the fan |  | 0 |  |
| \# | 7 | 4 | If a 200 gram mass were then added to the cart, fin the new acceleration |  | 0 |  |
| \# | 8 | 120 | $\mathrm{m} / \mathrm{s}$ is the velocity of your car as it hits a tree. Your 50 kg body is slowed to zero in 0.8 seconds by the seatbelts. Find the force. |  | 0 |  |
| \# | 9 | 400 | $\mathrm{m} / \mathrm{s}$ is the velocity of a 250 gram bullet fired from a gun. Find the momentum for one bullet. |  | 0 |  |
| \# | 10 | 12 | $\mathrm{m} / \mathrm{s}$ is the velocity of 100 kg Boris, running towards you. How many bullets (exactly) would it take to stop Boris? |  | 0 |  |

