1. A ball is thrown downward from a height of 512 feet with a velocity of 64 feet per second. How long will it take for the ball to reach the ground? what will the velocity of the ball be when it hits the ground?
2. A missile is accelerating at a rate of $4 \mathrm{tm} / \mathrm{sec}^{2}$ from a position at rest in a silo 35 m below ground level. How high above the ground will it be after 6 seconds?
3. From the top of a 300 meter high cliff a ball is thrown straight up at a velocity of 20 meters per second. Assuming the ball misses the cliff on the way back down, how high is it 5 seconds after it is thrown, and how fast is it going?
