Acceleration Due to Gravity

1. A rocket is fired up into the air with a vertical velocity of 80m/s. What will its velocity be after 5 seconds?

2. A ball is dropped from a tall building. What will its velocity be after 2 seconds?

3. How fast is a rock thrown up into the air if it reaches its maximum height 5 seconds later?

4. A very dumb child shoots an arrow into the air at a velocity of 150m/s [up]. What will the velocity of the arrow be after 20 seconds?

5. A rock is thrown downwards from a tall building. 3 seconds later, its velocity is 63m/s [down]. What was the initial velocity of the rock?