PROJECTILE MOTION PROBLEMS
brief answers

Full solutions to the problems are available in the Solutions document, and in the YouTube videos.

You can find links to these resources at my website:
http://www.freelance-teacher.com/videos.html

Links to the documents are also in the video description boxes for the YouTube videos.

Video (1)

H = 1.9 m

Video (2)

(a) The package will land at a horizontal distance of 235 m from the release point.
(b) The package hits the ground with a speed of 105 m/s.

Video (3)

$$D = v_0\sqrt{\frac{2h}{g}}$$

Video (4)

(a) The ball was hit with an initial speed of 53 m/s, at an angle of 25° above the horizontal.
(b) The ball was in the air for 4.5 s.
(c) The smallest value of the ball's speed over its whole trajectory is 48 m/s.