

W1.14-H**Linear Motion Word Problems**

1. A helicopter is moving upward with a constant velocity of 20 m/s. A package is released from the rising aircraft at a height of 225 m. How long does it take for the package to reach the ground?
2. A helicopter lifts off from the deck of an aircraft carrier and accelerates upwards at a rate of 5 m/s/s. The deck is 30 m above the surface of the water. At 10 seconds into the flight, a coffee mug falls out of the door of the helicopter. How long does it take to hit the water?
3. A ball rolls down an incline. It is released from rest and rolls 2 m in the first seconds. How far does it roll in the third second?
4. A ball rolls down an incline. It is released from rest and rolls 12 m in the first two seconds. How far does it roll in the fifth second?

W1.14-H KEY

1. 9 sec
2. 14 sec
3. 10 m
4. 27 m