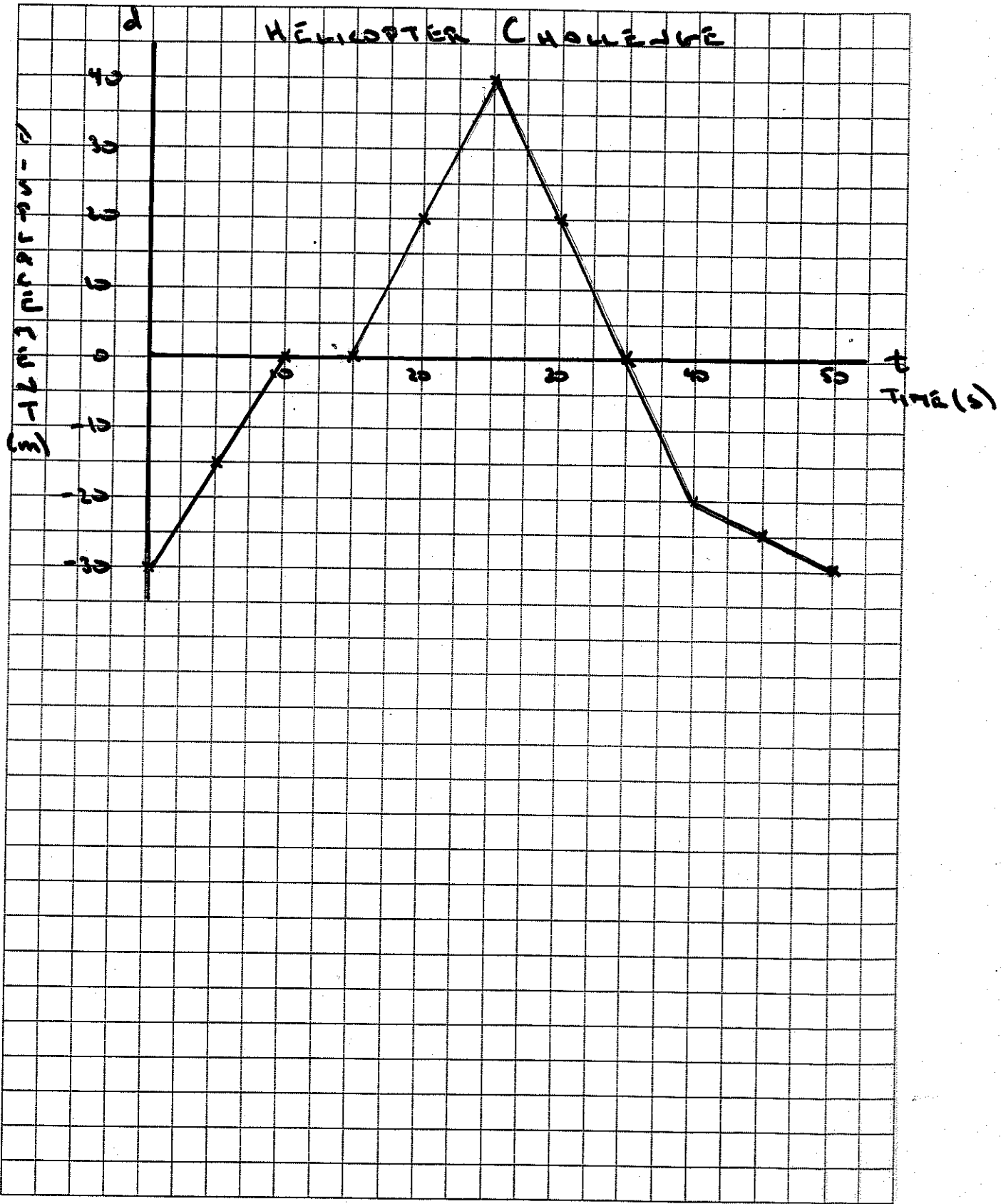HELICOPTER CHALLENGE

CHAPTER 10
ASSESSMENT

BLM 10-2

The Helicopter Challenge (continued)

2. Write a short paragraph to describe the motion of the helicopter.

   MOVES UP TO WINDOW FROM BELOW @ CONSTANT SPD.
   HOVERS IN FRONT OF WINDOW FOR 5s. MOVES UP
   TO 40 m QUICKLY @ CONSTANT SPEED, COMES DOWN AT
   SAME SPEED TO -20m. SLOWLY DESCENDS LAST
   10 m TO GROUND

3. When was the helicopter moving up? How do you know?

   0s TO 10s, 15s TO 25s. POSITIVE SLOPE
   AND INCREASING HEIGHT.

4. When was the helicopter moving down? How do you know?

   25s TO 50s. NEGATIVE SLOPE AND DECREASING
   HEIGHT.

5. When might the helicopter have been stationary? Do you have enough information to be sure? Explain your answer.

   10s TO 15s b/c HEIGHT NOT CHANGING.
   CAN'T BE SURE. MIGHT BE MOVING HORIZONTALLY.
   (OR COULD BE BOBBING UP AND DOWN)

6. Why were you told to connect all the points on your graph with straight lines?

   VELOCITY IS ASSUMED TO BE CONSTANT
   DURING THESE INTERVALS.

7. How could you infer from the data that the helicopter landed safely?

   SHALLOW SLOPE.