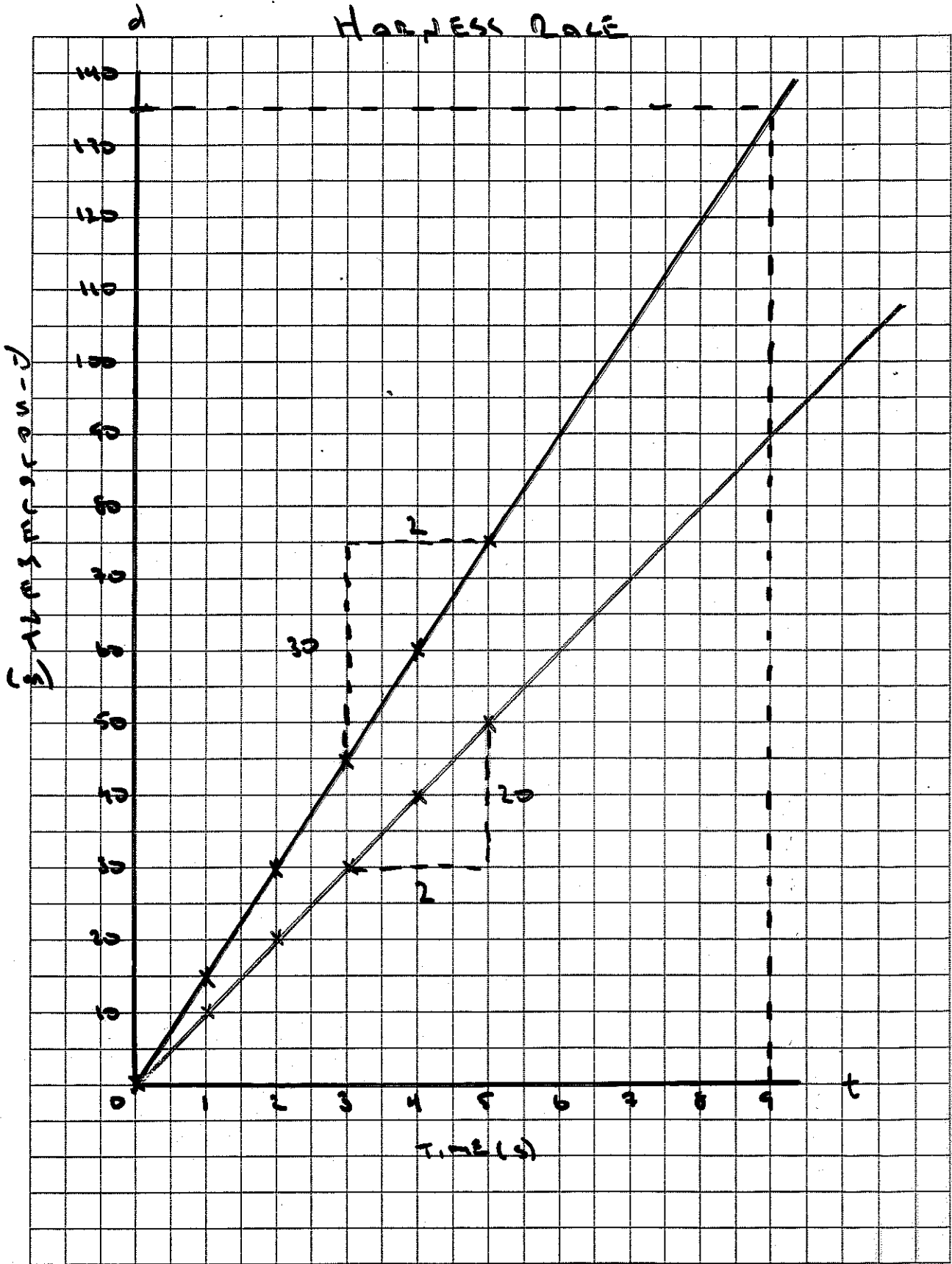


# HARNESS LAKE



**CHAPTER 10**  
**REINFORCEMENT**
**BLM 10-4**
**The Harness Race** (continued)

2. Calculate the velocity of each horse.

Velocity of horse 1 =

$$\vec{v} = \text{SLOPE}$$

$$= 15 \text{ m/s}$$

Velocity of horse 2 =

$$\vec{v} = 10 \text{ m/s}$$

3. Which horse travelled farther in the 5.0 s? 1

4. Which horse had the greater speed? Why?

HORSE 1. GREATER SLOPE AND MORE DISP. IN SAME TIME.

5. Explain how you can tell which horse was moving faster from

(a) the table GREATER DIST. COVERED

(b) the graph GREATER SLOPE

6. Describe the motion of each horse.

UNIFORM VELOCITY. HORSE 1 IS FASTER.

7. (a) Find the position of horse 1, 8.0 s from the start. Explain how you found your answer.

$$\vec{v} = 15 \text{ m/s}$$

$$\Delta t = 8.0 \text{ s}$$

$$\Delta \vec{d} = \vec{v} \cdot \Delta t$$

$$= (15 \text{ m/s})(8.0 \text{ s})$$

$$\Delta \vec{d} = 120 \text{ m}$$

- (b) Use another method to find the position of horse 1, 9.0 s from the start.

FIND GRAPH

$$\Delta \vec{d} = 135 \text{ m}$$