CLASS:

CHAPTER 11 SCIENCE INQUIRY

Recognizing Accelerated Motion

BLM 11-2

Goal • Determine whether an object is accelerating or moving with uniform motion.

What to Do

Answer each question in the space provided.

1. Carefully examine each diagram below. Decide whether the diagram represents accelerated or uniform motion, and explain your reasons. Any dotted lines indicate the path of the object.

(a)

 $v = 3.0 \,\text{m/s}$

 $v = 3.0 \,\text{m/s}$

v = 3.0 m/s

 $v = 3.0 \,\text{m/s}$



Type of motion: Uniform motion

, constant direction

(b)

 $v = 3.0 \,\text{m/s}$

v = 3.0 m/s

v = 3.0 m/s

v = 3.0 m/s



Type of motion: accelerated motion

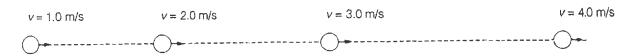
Explanation: direction changes

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Motion (continued)

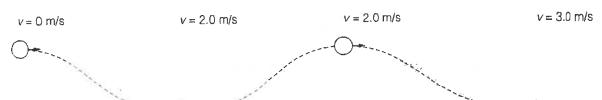
(c)



Type of motion: accelerated motion

Explanation: Speed Changes

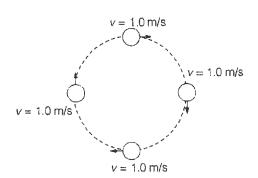
(d)



Type of motion: <u>accelerated motion</u>

Explanation: Speed and direction change

(e)



Type of motion: accelerated motion

Explanation: direction changes

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Recognizing Accelerated Motion (continued)

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(f)				
	v = 2.0 m/s		v = 2.0 m/s	
	O			
	Type of motion: accelerated motion			
	Explanation: dire	ection changes		
. (a)	Under what conditions is an object moving with uniform motion?			
_	constant s	peed and direct	ian	
_				
(b)	Under what conditions i	s an object accelerating?		
_	speed an	dor direction ch	anges	
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