

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

**PHYSICAL SETTING  
PHYSICS**

ANSWER SHEET

Vectors Key

Student ..... Sex:  Male  Female Grade .....

Teacher ..... School .....

Record your answers to Part A and Part B-1 on this answer sheet.

Part A

Part B-1

- 1 ..... 3
- 2 ..... 3
- 3 ..... 1
- 4 ..... 3
- 5 ..... 1
- 6 ..... 1
- 7 ..... 4
- 8 ..... 1
- 9 ..... 4
- 10 ..... 1



Write your answers to Part B-2 and Part C in your answer booklet.

The declaration below should be signed when you have completed the examination.

I do hereby affirm, at the close of this examination, that I had no unlawful knowledge of the questions or answers prior to the examination and that I have neither given nor received assistance in answering any of the questions during the examination.

Signature

Tear Here

Tear Here

# PHYSICAL SETTING PHYSICS

## ANSWER BOOKLET

Student ..... Sex:  Male  
 Female  
 Teacher.....  
 School..... Grade .....

Answer all questions in Part B-2 and Part C. Record your answers in this booklet.

Part	Maximum Score	Student's Score
A	10	
B-1		
B-2		
C	19	
Total Written Test Score (Maximum Raw Score: 29)		<input type="text"/>
Final Score (From Conversion Chart)		<input type="text"/>
Raters' Initials:		
Rater 1 .....		Rater 2 .....

**Part C**

11  $1.0 \text{ cm} = \underline{0.21 \text{ m/s} \pm 0.1} \text{ m/s}$

12

13  $\underline{1.66 \pm 0.12} \text{ m/s}$

14  $\underline{65 \pm 2}^\circ$

For Raters Only

11

12

13

14

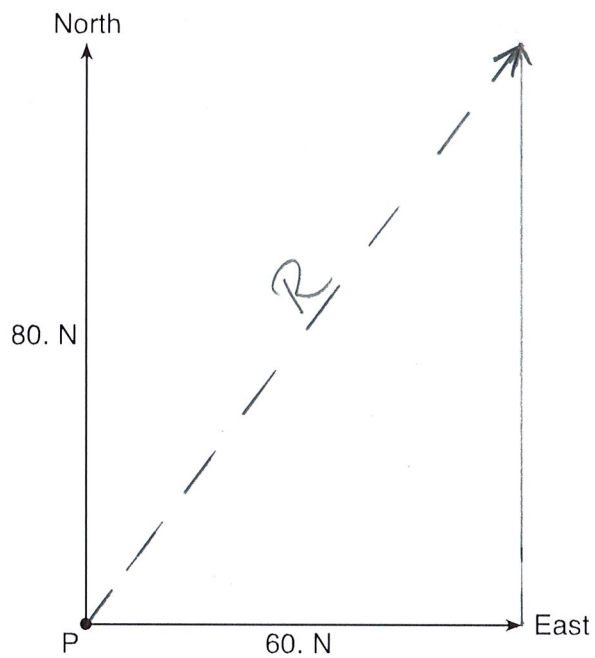
[OVER]

For Raters  
Only

15 1.0 cm = 10.4 ± 0.1 N

15

16



16

17 100 ± 3 N

17

18 37 ± 2 °

18

Part C

19-20

$$\bar{v} = \frac{d}{t}$$

$$t = \frac{d}{v}$$

$$t = \frac{75\text{m}}{3\text{m/s}}$$

$$v = 3\frac{\text{m}}{\text{s}}$$

$$d = 75\text{m}$$

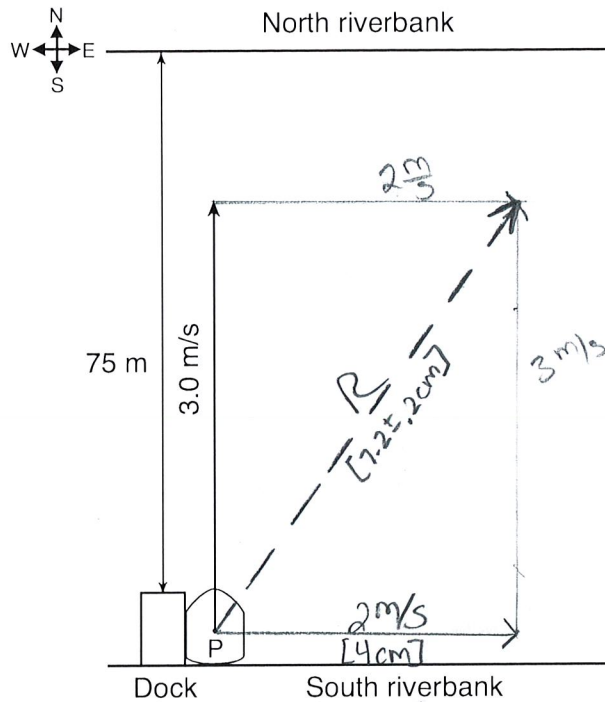
$$t = 25\text{s}$$

For Raters Only

19

20

21



21

22-23 (2 ways to solve)

1) Calculate:

$$a^2 + b^2 = c^2$$

$$\left(3\frac{\text{m}}{\text{s}}\right)^2 + \left(2\frac{\text{m}}{\text{s}}\right)^2 = c^2$$

$$13 = c^2$$

$$c = 3.6\frac{\text{m}}{\text{s}}$$

2) Graphically: see above diagram

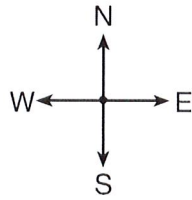
$$R = 3.6\text{m/s}$$

22

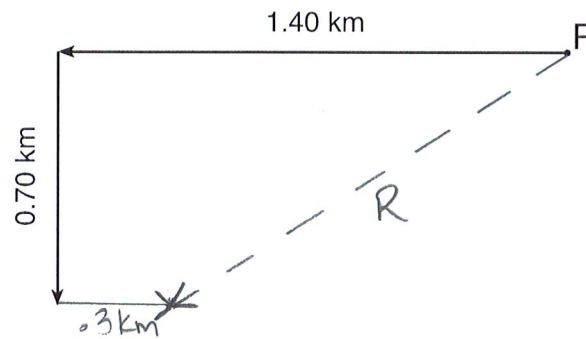
23

For Raters Only

24-25



Scale  
1.0 cm = 0.20 km



24

25

26

27

26-27

G

$$\text{distance} = 2.4 \text{ km} = 2400 \text{ m}$$

$$t = 12 \text{ min} = 720 \text{ s}$$

$$\bar{v} = \frac{d}{t} = \frac{2400 \text{ m}}{720 \text{ s}}$$

$$\bar{v} = 3.3 \frac{\text{m}}{\text{s}}$$

28

29

28 1.3 ± 0.2 km Graphically or Calculate

29 32 ± 2 ° Graphically or Calculate

