Topic 11 Review Homework Name _____

MULTIPLE CHOICE: Use the blank space to show your work.

1. A grocery store sign indicates that bananas are 6 for $1.50, and a sign by the oranges indicates that they are 5 for $3.00. Find the total cost of buying 2 bananas and 2 oranges?

A. $0.85

B. $1.70

C. $2.25

D. $4.50

2. Amy drove to her mother's house, which is 204 miles away. If it took her 3 hours, what was her average speed?

3. Which is the best buy?

6 shirts for $25.50 **4 shirts for $18.00** **5 shirts for $21**

4. Ashley needs to ride her bike to her friend's house 96 miles away. She is riding at an average rate of 15 miles per hour. She has 6 hours to get there. Will she make it?

5. A runner ran 20 miles in 150 minutes. If she runs at that speed,

a. How fast is she running in miles per hour?

b. What is her pace in minutes per mile?

c. How long would it take her to run 6 miles?

d. How far could she run in 15 minutes?

6. Tom jogged from 10:30 a.m. to 12:15 p.m. He traveled a distance of 7 miles.

a. What was his average rate of jogging?

b. At 12:15 p.m., he decided to go an additional 5 miles at the same rate. At what time should he finish the additional 5 minutes?

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1. A grocery store sign indicates that bananas are 6 for $1.50, and a sign by the oranges indicates that they are 5 for $3.00. Find the total cost of buying 2 bananas and 2 oranges?

A. $0.85

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B: $\frac{\$1.50}{6 \text{ bananas}} \overset{\div 3}{=} \frac{\$0.50}{2 \text{ bananas}}$ ($\div 3$)

O: $\frac{\$3.00}{5 \text{ oranges}} \overset{\div 5}{=} \frac{\$0.60}{1 \text{ orange}} \overset{\times 2}{=} \frac{\$1.20}{2 \text{ oranges}}$ ($\div 5$, $\times 2$)

$0.50 + $1.20 = $1.70

2. Amy drove to her mother's house, which is 204 miles away. If it took her 3 hours, what was her average speed?

miles per hour

$\frac{204 \text{ miles}}{3 \text{ hrs}} \overset{\div 3}{=} \frac{68 \text{ miles}}{1 \text{ hr}} = 68 \text{ mph}$

3. Which is the best buy?

6 shirts for $25.50

$\frac{\$25.50}{6 \text{ shirts}} \overset{\div 6}{=} \frac{\$4.25}{1 \text{ shirt}}$

4 shirts for $18.00

$\frac{\$18.00}{4 \text{ shirts}} \overset{\div 4}{=} \frac{\$4.50}{1 \text{ shirt}}$

CHEAPEST

5 shirts for $21

PER SHIRT

$\frac{\$21.00}{5 \text{ shirts}} \overset{\div 5}{=} \frac{\$4.20}{1 \text{ shirt}}$

4. Ashley needs to ride her bike to her friend's house 96 miles away. She is riding at an average rate of 15 miles per hour. She has 6 hours to get there. Will she make it?

$\frac{15 \text{ miles}}{1 \text{ hr}} \overset{\times 6}{=} \frac{90 \text{ miles}}{6 \text{ hrs}}$

She will be 6 miles short!

2.5 hrs

5. A runner ran 20 miles in 150 minutes. If she runs at that speed,

a. How fast is she running in miles per hour?

$\frac{20 \text{ miles}}{2.5 \text{ hrs}} \overset{\div 2.5}{=} \frac{8 \text{ miles}}{1 \text{ hr}}$ for one hr

÷2.5

8 miles per hour

b. What is her pace in minutes per mile?

for one mile

$\frac{150 \text{ min}}{20 \text{ miles}} \overset{\div 20}{=} \frac{7.5 \text{ min}}{1 \text{ mile}}$

÷20

7.5 minutes per mile

c. How long would it take her to run 6 miles?

$\frac{150 \text{ min}}{20 \text{ mi}} = \frac{x}{6 \text{ mi}}$

$20x = 900$

÷20 ÷20

$x = 45$

45 minutes

d. How far could she run in 15 minutes?

$\frac{150 \text{ min}}{20 \text{ mi}} \overset{\div 10}{=} \frac{15 \text{ min}}{2 \text{ miles}}$

÷10

2 miles

6. Tom jogged from 10:30 a.m. to 12:15 p.m. He traveled a distance of 7 miles.

1 hr 45 min = 1.75 hrs = 105 minutes

a. What was his average rate of jogging?

$\frac{7 \text{ mi}}{1.75 \text{ hrs}} \overset{\div 1.75}{=} \frac{4 \text{ mi}}{1 \text{ hr}}$

÷1.75

4 miles per hr

b. At 12:15 p.m., he decided to go an additional 5 miles at the same rate. At what time should he finish the additional 5 ~~minutes~~ miles?

$\frac{4 \text{ miles}}{60 \text{ min}} \overset{\div 4}{=} \frac{1 \text{ mile}}{15 \text{ min}} \overset{\times 5}{=} \frac{5 \text{ miles}}{75 \text{ min}}$

÷4 ×5

12:15 pm
+ 75 minutes
=
1:30 pm