Name: $\qquad$ Per.: $\qquad$ Date: $\qquad$

## Speed, Distance and Time Practice

Directions: Use your study guides and notes to help you. Make sure you use pencil and show your work!

## Magic triangle:



## Equations:

Speed =
Distance =
Time $=$

## Practice with Distance-Time-Speed Problems

Steps for completing:

1. Read the question once.
2. See what the question asks you to find (the unknown variable).
3. Find the value of the known quantities.
4. Read the question again and make sure you have the correct value for each.
(These questions can be tricky!)
5. Set up the equation. MAKE SURE YOU INCLUDE THE UNITS!!!!
6. Solve for the unknown variable.
7. PLACE YOUR ANSWER ON THE LINE!

Snails crawl very slowly. If a garden snail crawls at $0.013 \mathrm{~m} / \mathrm{s}$ north, how far will it travel in 60 seconds?
$S=$ $\qquad$

$$
d=
$$

$t=$ $\qquad$

A greyhound dog can run with a top speed of $17.6 \mathrm{~m} / \mathrm{s}$. At this rate, how long will it take to run 100 meters?
S $=$ $\qquad$
$\mathrm{d}=$ $\qquad$
$\qquad$

## Graphing

## Reading Distance-Time Graphs

The distance -time graphs below represent the motion of a car. Match the descriptions with the graphs. Explain your answers.


Descriptions:

1. The car drove at a constant speed and stopped.
2. The car is traveling at constant speed.
3. The car drove at a constant speed, then stopped, then drove at a constant speed again.
4. The car increased its speed and then stopped.

Graph A matches description $\qquad$ because $\qquad$
$\qquad$
$\qquad$
Graph B matches description $\qquad$ because $\qquad$
$\qquad$
$\qquad$ -

Graph C matches description $\qquad$ because $\qquad$
$\qquad$
$\qquad$ .

Graph D matches description $\qquad$ because $\qquad$
$\qquad$
$\qquad$ .

## Creating a Distance-Time Graph

Sam drove his delivery truck of Ben and Jerry's ice-cream on a delivery route. He recorded the time and distance for each part of the trip. Use the data to create a distancetime graph, and then answer the questions below the graph. Remember to include labels and units.

| Time $(\mathrm{h})$ | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Distance $(\mathrm{km})$ | 0 | 5 | 8 | 10 | 10 | 16 | 24 |


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1. During what time period was Sam driving the slowest?
2. During what time period was Sam driving the fastest? $\qquad$
3. During what time period was Sam stopped?
4. What was Sam's average speed between 0 and 6 hours ? Show your work!

## Speed and Velocity Practice Problems

Directions: Complete these problems. Show your work, including formulas and units of measure.

1. If a cross country runner covers a distance of 287 meters in 154 seconds what is her speed?
2. What is the speed of a baseball that travels 49 meters in 2.4 seconds?
3. Which has a greater speed a ball rolling down a 3.4 meter hill in 6 seconds or a fish swimming upstream and covering 5.4 meters in 24 seconds?
4. How long does a horse take to run a distance of 6 miles at 16 miles/hour?
5. If the Banley Park trail is a bit more than 300 meters long and you walk at a pace of $1.3 \mathrm{~m} / \mathrm{s}$, how long will it take you to walk across the green?
6. If the stink bug in our classroom can move at a speed of $0.04 \mathrm{~m} / \mathrm{s}$, how long will it take for the bug to move 5 meter?
