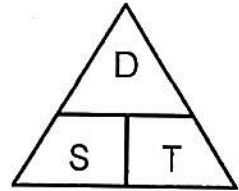




Name: _____ Date: 10/3/17 Period: _____

Speed Worksheet

Directions: Solve the following speed problems. Use the triangle to help solve the problems. Show all your work. Circle your answer.



1. Calculate the speed for a car that went a distance of 125 kilometers in 2 hour ^T

Formula	$S = \frac{d}{T}$
Substitution	$S = \frac{125 \text{ km}}{2 \text{ hr}}$
Final answer with units	$S = 62.5 \text{ Km/hr}$

2. A baseball is thrown a distance of 20 meters. What is its speed if it takes 0.5 seconds to cover the distance? ^d [?] ^t

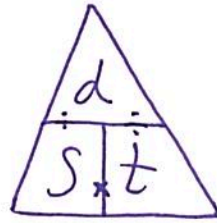
Formula	$S = \frac{d}{T}$
Substitution	$S = \frac{20 \text{ m}}{0.5 \text{ s}}$
Final answer with units	$S = 40 \text{ m/s}$

3. How much time does it take for a bird flying at a speed of 45 kilometers per hour to travel a distance of 1,800 kilometers? [?] ^d ^S

Formula	$t = \frac{d}{S}$
Substitution	$t = \frac{1800 \text{ km}}{45 \text{ km/hr}}$
Final answer with units	$t = 40 \text{ hr.}$

4. A comet is cruising through the solar system at a speed of $50,000$ kilometers per hour for 4 hour. What is the total distance traveled by the comet during this time?

Formula	$d = S \times t$
Substitution	$d = 50,000 \text{ Km/hr} \times 4 \text{ hr}$
Final answer with units	$d = 200,000 \text{ Km}$



5. If Steve throws the football 50 meters in 3 seconds, what is the average speed (velocity) of the football?

Formula	$S = \frac{d}{t}$
Substitution	$S = \frac{50 \text{ m}}{3 \text{ sec}}$
Final answer with units	$S = 16.7 \text{ m/s}$

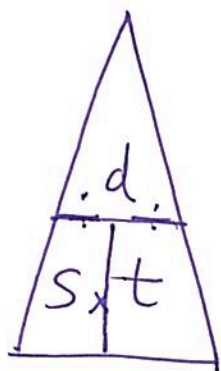
Round to the nearest tenth

6. If it takes Ashley 3 seconds to run from the batter's box to first base at an average speed (velocity) of 6.5 meters per second, what is the distance she covers in that time?

Formula	$d = S \times t$
Substitution	$d = 6.5 \text{ m/s} \times 3 \text{ sec}$
Final answer with units	$d = 19.5 \text{ meters}$

7. Bart ran 5000 meters from the cops and an average speed (velocity) of 6 meters/second before he got caught. How long did he run?

Formula	$t = \frac{d}{s}$?
Substitution	$t = \frac{5000 \text{ m}}{6 \text{ m/s}}$
Final answer with units	$t = 833.3 \text{ s}$



8. If Justin races his Chevy $\$$ -10 down Highway 37 for 2560 meters in 60 seconds, what is his average speed (velocity)?

Formula	$s = \frac{d}{t}$
Substitution	$s = \frac{2560 \text{ m}}{60 \text{ s}}$
Final answer with units	$s = 42.7 \text{ m/s}$

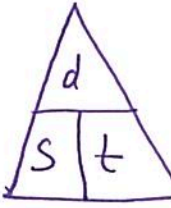
Round to the nearest tenth.

9. Mike rides his motorcycle at an average speed (velocity) of 20 meters/second for 500 seconds, how far did he ride?

Formula	$d = s \times t$
Substitution	$d = 20 \text{ m/s} \times 500 \text{ sec}$
Final answer with units	$d = 10,000 \text{ meters}$

10. Sarah backstrokes at an average speed of 8 meters per second, how long will it take her to complete the race of 200 meters length?

Formula	$t = \frac{d}{s}$
Substitution	$t = \frac{200 \text{ m}}{8 \text{ m/s}}$
Final answer with units	$t = 25 \text{ seconds}$



11. Lauren's SUV was detected exceeding the posted speed limit of 60 kilometers per hour, how many kilometers per hour would she have been traveling over the limit if she had covered the a distance of 10 kilometers in 0.1 hours?

Formula	$s = \frac{d}{t}$
Substitution	$s = \frac{10 \text{ Km}}{0.1 \text{ hr}}$
Final answer with units	$s = 100 \text{ Km/hr}$

$$\begin{array}{r} 100 \text{ Km/hr} \\ - 60 \text{ Km/hr} \\ \hline 40 \text{ Km/hr over the} \\ \text{Speed Limit} \end{array}$$

12. Tina's calculations of the tarantula found that the spider was able to cover 20 centimeters in 5 seconds, what was the average speed of the spider?

Formula	$s = \frac{d}{t}$
Substitution	$s = \frac{20 \text{ cm}}{5 \text{ sec}}$
Final answer with units	$s = 4 \text{ cm/sec}$

13. A coach wants to find out the speed of the runners on a track team. Tell what simple equipment the coach needs in order to do this and explain how it should be done.

Stop watch (measures time)

Meter stick (measures distance)

* Remember - $\text{speed} = \frac{\text{distance}}{\text{time}}$