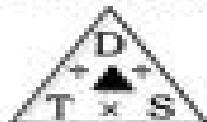


NAME \_\_\_\_\_

### Speed, Distance, and Time Math Challenge #1

• Directions: Read each problem and then solve to determine the correct answer! Show your work on the problem will be counted as being incorrect regardless of your answer.



#### REMEMBER!

**S** = Speed      **S** =  $D \div T$   
**D** = Distance    **D** =  $T \times S$   
**T** = Time        **T** =  $D \div S$

1. A baseball is thrown a distance of 20 meters. What is its speed if it takes 0.5 seconds to cover the distance?

• Baseball's speed: \_\_\_\_\_

4. When a skydiver opens their parachute, they descend at a rate of 3 m/s. If a skydiver is 1200 meters up in the air, then how long will it take for them to reach the ground?

• Time before reaching the ground: \_\_\_\_\_

2. A car leaves Memphis at 1:00 pm and arrives in New Orleans at 4:30 pm. The car was traveling an average speed of 45 miles per hour. How far away is New Orleans from Memphis?

• Distance between cities: \_\_\_\_\_

3. On average, a human hair grows about .01 inches per month. If someone had 12 inches of hair and were to dye a different color, then they will have to let their hair grow a foot before it will be back to its normal length and color. How long will that take?

• Time for hair to grow: \_\_\_\_\_

5. The Mid-Atlantic Ridge is a spreading crack between continental plates and it moves apart at 2.4 centimeters per year. New York is 3727 kilometers from London. In 1,000,000 years, how many far apart will New York be from London?

• Distance between cities: \_\_\_\_\_

3. A football player kicks a ball 4.5 meters. How much time is needed for a ball to travel this distance if its speed is 22 m/s?

• Time traveled: \_\_\_\_\_

7. The Earth is 150,000,000 kilometers away from the Sun. The speed of light is about 300,000 km/s. How many minutes does it take for light to travel from the Sun to the Earth?

• Time that light travels to Earth: \_\_\_\_\_