Name _____ Date _____

Speed, Distance and Time: Calculating and Comparing Average Speeds

Directions: Each question gives the formula you need. Type only the number in each answer box. The unit is shown next to the box.

1. Average speed = distance ÷ time. Luis rides his skateboard 60 meters along a flat path in 15 seconds. What is his average speed?

_____ m/s

2. Average speed = distance ÷ time. You can use this one relationship to find any of the three quantities if you know the other two. Match each goal to the calculation that reaches it.

Write the letter of the matching answer on each line.

1. _____ Find the speed when you know the distance and the time
2. _____ Find the distance when you know the speed and the time
3. _____ Find the time when you know the distance and the speed

A. Divide the distance by the time
B. Multiply the speed by the time
C. Divide the distance by the speed
D. Divide the time by the distance
E. Multiply the distance by the speed

3. Distance = speed × time. Ines sees a flash of lightning and hears its thunder 4 seconds later. The light reaches her almost instantly, and the sound travels at about 340 meters per second. Using 340 meters per second, how far away was the lightning? Type your answer without a comma.

_____ m

4. Time = distance ÷ speed. A delivery truck drives 195 miles on a highway at an average speed of 65 miles per hour. How many hours does the drive take?

_____ hours

5. A city bus takes 1 hour to finish a 24-kilometer route, so its average speed is 24 kilometers per hour. Along the way, it stops at red lights and bus stops. Which statement about the bus is true?

A. It never went faster than 24 km/h.

B. It moved at exactly 24 km/h for the whole hour.

C. Its speedometer showed 24 km/h each time it waited at a red light.

D. Its speed changed during the trip, and 24 km/h describes the trip as a whole.

Trips to School

Use the table to answer these questions.

Four students' trips from home to school

Student	How the student travels	Distance (meters)	Time (minutes)
Rosa	Walks	1,200	15
Dev	Rides a bike	3,000	12
Kenji	Rides a scooter	1,800	12
Amara	Rides the bus	6,000	20

6. Average speed = distance ÷ time. What was Kenji's average speed on his scooter ride to school, in meters per minute?

_____ m/min

7. Dev and Kenji each took 12 minutes to get to school. Which statement about their average speeds is true?

A. They had the same average speed, because they took the same amount of time.

B. Dev had the greater average speed, because his trip took more time than Kenji's.

C. Dev had the greater average speed, because he covered more distance in the same amount of time.

D. Kenji had the greater average speed, because his trip was shorter.

8. Amara's trip took more time than any other trip in the table. Of the four students, who had the greatest average speed?

A. Kenji B. Amara C. Rosa D. Dev

9. Average speed = total distance ÷ total time. Mei's family drives 240 kilometers on a highway in 3 hours. Then they drive 60 kilometers through a city in 2 hours. What is their average speed for the whole trip?

A. 100 km/h B. 150 km/h C. 60 km/h D. 55 km/h

10. Average speed = distance ÷ time. Students time five toy cars, and each car rolls a different distance. Which two cars have the same average speed?

☐ A. Yellow car: 150 centimeters in 6 seconds

☐ B. Blue car: 100 centimeters in 5 seconds

☐ C. Green car: 90 centimeters in 3 seconds

☐ D. Red car: 120 centimeters in 4 seconds

☐ E. White car: 160 centimeters in 4 seconds