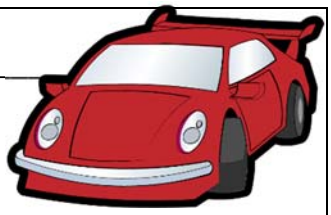
Name _____



Fast & Furious Formulas

Speed = Distance ÷ Time | Distance = Speed × Time | Time = Distance ÷ Speed

Part A: Finding Speed

1. During a high-speed test, a sports car travels 240 kilometers along a straight track in 3 hours. What is the car's average speed in kilometers per hour?

2. A motorcycle rider completes a 90-kilometer route through the countryside in 1.5 hours. Determine the rider's average speed.

3. On a closed circuit, a race car covers a total distance of 1,200 meters in 40 seconds. Calculate the car's speed in meters per second.

Part B: Finding Distance

4. A car leaves the city and travels at a steady speed of 80 kilometers per hour for 2.5 hours. How far from the city does the car end up?

5. A motorcycle maintains a constant speed of 72 kilometers per hour for a 50-minute ride. How many kilometers does the rider travel during that time?

6. A dragster at the racetrack launches off the starting line at a speed of 150 meters per second and maintains that speed for 10 seconds. How far does it go before stopping?

Part C: Finding Time

7. A driver covers 300 kilometers on a highway while maintaining a constant speed of 100 kilometers per hour. How long does the trip take from start to finish?

8. A car travels from City A to City B, a distance of 180 kilometers, at an average speed of 90 kilometers per hour. How much time does the trip require in hours and minutes?

9. A go-kart on a small track travels 1.2 kilometers at a speed of 60 kilometers per hour. How many minutes does the journey take to complete one lap?

Part D: Mixed Formula Challenge

10. A test driver takes a car on a two-part journey:

For the first section, the car travels 150 kilometers at an average speed of 75 kilometers per hour. For the second section, the car increases its speed to 100 kilometers per hour for another 150 kilometers.

a) How long does each section of the journey take?

b) What is the total travel time?

c) What is the overall average speed for the entire 300-kilometer trip?