

MiSP Motion Assessment L1

Name: _____

Date: _____

For questions 1–4, show the formula, the substitution, and the final answer.

1. Calculate the speed of a car that went a distance of 125 miles in 2 hours' time.

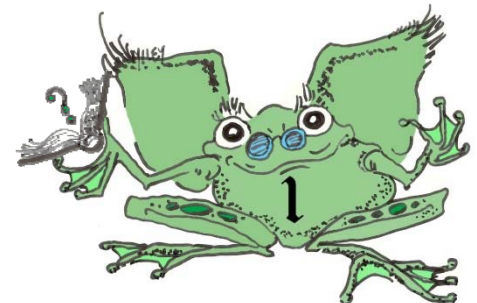
| <u>Formula</u> | <u>Substitution</u> | <u>Final Answer</u> |
|----------------|---------------------|---------------------|
| | | |

2. A baseball is thrown a distance of 20 meters in 0.5 seconds. What is the speed of the baseball?

| <u>Formula</u> | <u>Substitution</u> | <u>Final Answer</u> |
|----------------|---------------------|---------------------|
| | | |

3. How much time does it take for a bird flying at a speed of 65 kilometers per hour to travel a distance of 3,000 kilometers?

| <u>Formula</u> | <u>Substitution</u> | <u>Final Answer</u> |
|----------------|---------------------|---------------------|
| | | |



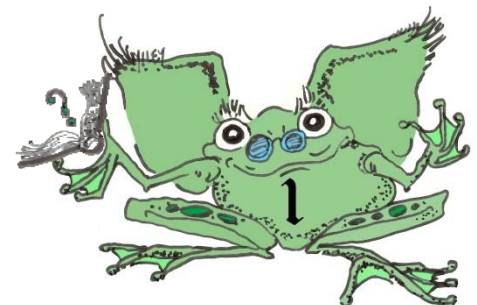
4. A comet is cruising through the solar system at a speed of 50,000 kilometers per hour for 4 hours' time. What is the total distance traveled by the comet during this time?

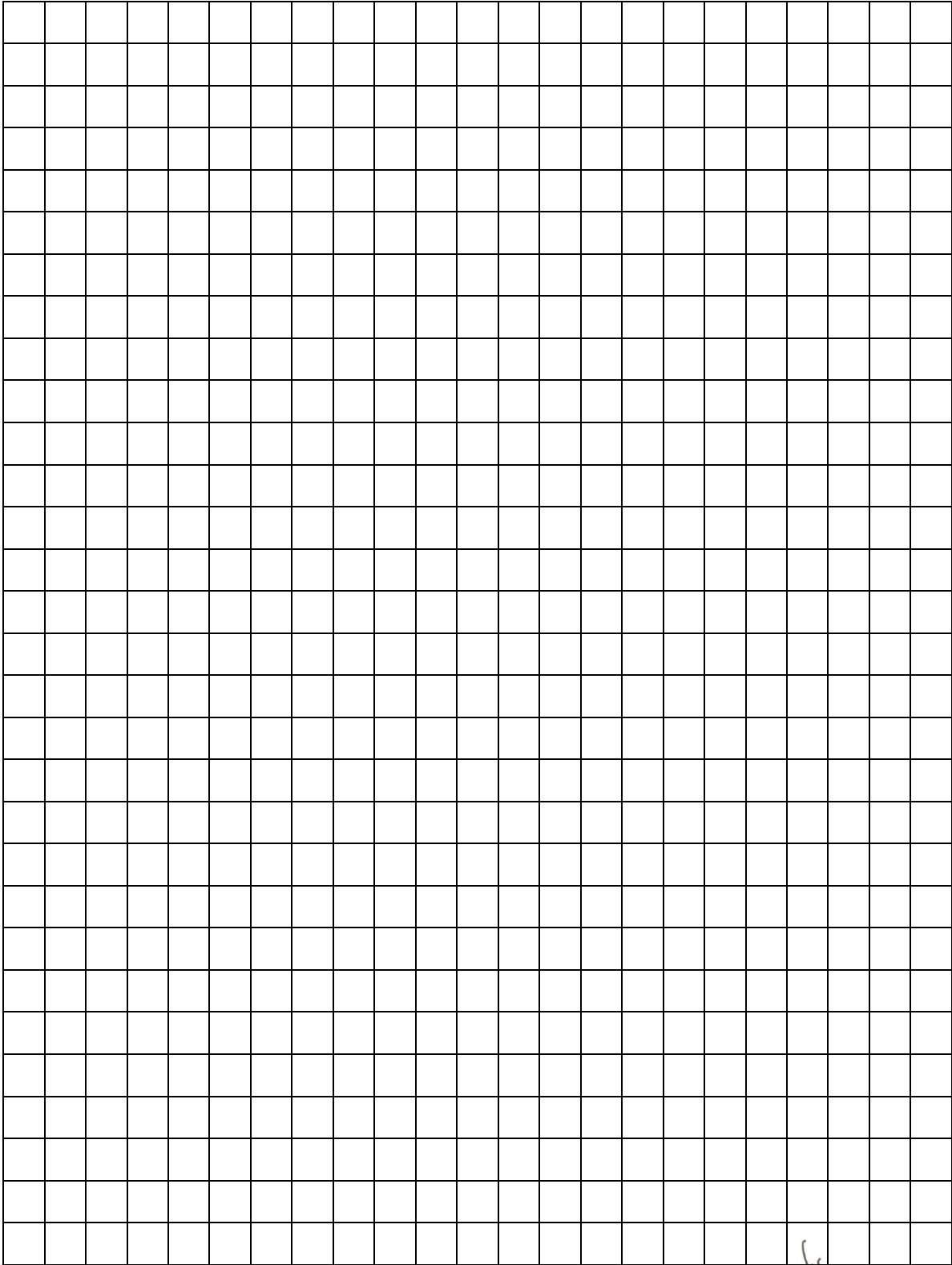
| <u>Formula</u> | <u>Substitution</u> | <u>Final Answer</u> |
|----------------|---------------------|---------------------|
| | | |

5. A car traveled a total distance of 200 kilometers in 2 hours. The data table below shows the car's distance from the starting location at 0.5-hour intervals during the trip.

| Time (hours) | Distance (kilometers) |
|--------------|-----------------------|
| 0.0 | 0 |
| 0.5 | 50 |
| 1.0 | 100 |
| 1.5 | 150 |
| 2.0 | 200 |

Plot the time and distance on the grid on the next page.





6. Calculate the speed of the object. Show your work and include units in your answer.

