

Name _____

Date _____

Getting the Job Done—Speed, Work, and Measurement Units

Franny took a road trip to her grandmother’s house. She drove at a constant speed of 60 miles per hour for 2 hours. She took a break and then finished the rest of her trip driving at a constant speed of 50 miles per hour for 2 hours. What was the total distance of Franny’s trip?

1. If Adam's plane traveled at a constant speed of 375 miles per hour for six hours, how far did the plane travel?
2. A Salt Marsh Harvest Mouse ran a 360 centimeter straight course race in 9 seconds. How fast did it run?
3. Another Salt Marsh Harvest Mouse took 7 seconds to run a 350 centimeter race. How fast did it run?
4. A slow boat to China travels at a constant speed of 17.25 miles per hour for 200 hours. How far was the voyage?
5. The Sopwith Camel was a British, First World War, single-seat, biplane fighter introduced on the Western Front in 1917. Traveling at its top speed of 110 mph in one direction for $2\frac{1}{2}$ hours, how far did the plane travel?
6. A world-class marathon runner can finish 26.2 miles in 2 hours. What is the rate of speed for the runner?
7. Banana slugs can move at 17 cm per minute. If a banana slug travels for 5 hours, how far will it travel?

Franny took a road trip to her grandmother's house. She drove at a constant speed of 60 miles per hour for 2 hours. She took a break and then finished the rest of her trip driving at a constant speed of 50 miles per hour for 2 hours. What was the total distance of Franny's trip?

$$d = 60 \frac{\text{miles}}{\text{hour}} \cdot 2 \text{ hours} = 120 \text{ miles}$$

$$d = 50 \frac{\text{miles}}{\text{hour}} \cdot 2 \text{ hours} = 100 \text{ miles}$$

$$120 \text{ miles} + 100 \text{ miles} = 220 \text{ miles}$$

1. If Adam's plane traveled at a constant speed of 375 miles per hour for six hours, how far did the plane travel?

$$d = r \cdot t$$

$$d = \frac{375 \text{ miles}}{\text{hour}} \times 6 \text{ hours} = 2,250 \text{ miles}$$

2. A Salt Marsh Harvest Mouse ran a 360 centimeter straight course race in 9 seconds. How fast did it run?

$$r = \frac{d}{t}$$

$$r = \frac{360 \text{ centimeters}}{9 \text{ seconds}} = 40 \text{ cm/sec}$$

3. Another Salt Marsh Harvest Mouse took 7 seconds to run a 350 centimeter race. How fast did it run?

$$r = \frac{d}{t}$$

$$r = \frac{350 \text{ centimeter}}{7 \text{ seconds}} = 50 \text{ cm/sec}$$

4. A slow boat to China travels at a constant speed of 17.25 miles per hour for 200 hours. How far was the voyage?

$$d = r \cdot t$$

$$d = \frac{17.25 \text{ miles}}{\text{hour}} \times 200 \text{ hours} = 3,450 \text{ miles}$$

5. The Sopwith Camel was a British, First World War, single-seat, biplane fighter introduced on the Western Front in 1917. Traveling at its top speed of 110 mph in one direction for $2\frac{1}{2}$ hours, how far did the plane travel?

$$d = r \cdot t$$

$$d = \frac{110 \text{ miles}}{\text{hour}} \times 2.5 \text{ hours} = 275 \text{ miles}$$

6. A world-class marathon runner can finish 26.2 miles in 2 hours. What is the rate of speed for the runner?

$$r = \frac{d}{t}$$

$$r = \frac{26.2 \text{ miles}}{2 \text{ hours}} = 13.1 \text{ mph or } 13.1 \frac{\text{mi}}{\text{h}}$$

7. Banana slugs can move at 17 cm per minute. If a banana slug travels for 5 hours, how far will it travel?

$$d = r \cdot t$$

$$d = \frac{17 \text{ cm}}{\text{min}} \times 300 \text{ min} = 5,100 \text{ cm}$$