

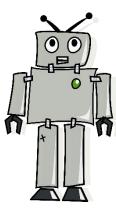
## Fraction word problems (unit fraction)

## Grade 5 Word Problems Worksheet

1. A computer uses  $\frac{1}{200}$  of a second to finish a math question. How many math questions can the computer answer in 2 minutes?

2. After a robot vacuum is fully charged, it can run for 15 minutes. It can vacuum  $\frac{1}{2}$  square foot every second. Can a fully charged robot clean a room that is 400 square feet without recharging?

3. An auto shop installed a new automatic system to do paint jobs for cars. The system can paint 6 cars in  $\frac{1}{4}$  hour. How long does it take to paint one car?





4. The distance between the first and the last stop of a bus route is  $\frac{1}{3}$  miles. Including the first and the last stop, there are 5 stops on this route. What is the average distance between the stops?

5. Before taking off, a plane travels at a speed of  $\frac{1}{4}$  km per second. The runway is 5 km. How many seconds does it take the plane to get to the end of the runway?

6. It takes the city train 5 hours to go from the first stop to the last stop. The actual travelling time is 3 hours and the train stops at each stop for  $\frac{1}{15}$  hour. How many stops are there?



## **Answers**

1.  $60 \times 2 \div \frac{1}{200} = 24,000$ 

The computer can answer 24,000 math questions in 2 minutes.

2.  $400 \div \frac{1}{2} \div 60 = 13\frac{1}{3}$ 

A room that is 400 square feet will take  $13\frac{1}{3}$  minutes to clean.

Yes, a fully charged robot can clean a room that is 400 square feet without recharging.

- 3.  $\frac{1}{4} \div 6 = \frac{1}{24}$ It takes  $\frac{1}{24}$  hour to paint one car.
- 4.  $\frac{1}{3} \div 4 = \frac{1}{12}$ The average distance between the stops is  $\frac{1}{12}$  miles.
- 5.  $5 \div \frac{1}{4} = 20$ It takes the plane 20 seconds to get to the end of the runway.
- 6.  $(5-3) \div \frac{1}{20} = 40$ There are 40 stops.