- 1. A car travels 200 miles in 4 hours. Calculate its average speed.
- 2. A man runs 100 m in 12.5 seconds. Calculate his average speed.
- 3. A train travels 80 miles in 1 hour 15 minutes. Calculate its average speed.
- 4. A person walks 15 km in 2 hour 30 minutes. Calculate his average speed.
- 5. A car travels 10 miles in 20 minutes. Calculate its average speed.
- 6. A jet fighter travels at 900 mph. How far will the jet travel in 4 hours?
- 7. An athlete runs at a constant speed of 8 m/s. How long will it take the athlete to run 400 m?
- 8. A tennis ball travels at 40 m/s. How far will it travel in 1<sup>1</sup>/<sub>2</sub> seconds?
- 9. A car travels 15 miles in 45 minutes. Calculate its average speed.
- 10. A middle distance runner runs at an average speed of 6 m/s. How long will it take him to run 1500 m, give your answer in seconds. Convert your answer to minutes.

Answers

1. 50 mph6. 3600 miles2. 8 m/s7. 50 s3. 64 mph8. 60 m4. 6 km/h9. 20 mph5. 30 mph10. 250 s, 4 min 10s or 4.2 min

## HOW FAR CAN IT GO OR HOW LONG DOES THE TRIP TAKE USING WHOLE OR HALF HOURS

1.

- a. Juan rides his horse with a constant speed of 16 km/h. How long will he take to travel a distance of 56 kilometres?
- b. David roller skates with a constant speed of 12 km/h. How far can he travel in  $\frac{1}{2}$  hour?
- 2.
- a. David rides his bike with a constant speed of 8 km/h. How long will he take to travel a distance of 8 kilometres?
- b. An airplane flies with a constant speed of 760 miles per hour. How far can it travel in 1  $\frac{1}{2}$  hours?

3.

- a. Cindy roller skates with a constant speed of 18 km/h. How long will she take to travel a distance of 54 kilometres?
- b. An airplane flies with a constant speed of 720 km/h. How far can it travel in  $\frac{1}{2}$  hour?

Answer Key

- 1 a. He takes 3 hours 30 minutes or 3  $\frac{1}{2}$  hours to travel a distance of 56 kilometres.
- 1 b. He can travel 6 kilometres in ½ hour.
- 2 a. He takes 1 hour to travel a distance of 8 kilometres.
- 2 b. It can travel 1140 miles in 1  $\frac{1}{2}$  hours.
- 3 a. She takes 3 hours to travel a distance of 54 kilometres.
  - 3 b. It can travel 360 kilometres in  $\frac{1}{2}$  hour.

# HOW FAR CAN IT GO, HOW LONG DOES THE TRIP TAKE, OR WHAT IS THE AVERAGE SPEED - USING WHOLE OR HALF HOURS

4.

- a. A car drives 252 km in 3 hours. What is its average speed in kilometres per hour?
- b. An airplane flies with a constant speed of 760 miles per hour. How long will it take to travel a distance of 1140 miles?
- 5.
- c. Caleb rides his horse with a constant speed of 20 km/h. How long will he take to travel a distance of 80 kilometres?
- d. An airplane flies with a constant speed of 960 km/h. How long will it take to travel a distance of 2880 kilometres?

6.

- e. An airplane flies 640 km in 1 hour. What is its average speed in kilometres per hour?
- f. A minibus drives with a constant speed of 84 km/h. How far can it travel in 4 hours?

Answer Key

- 4a. Its average speed is 84 kilometres per hour.
- 4 b. It takes 1 hour 30 minutes or 1½ hours to travel a distance of 1140 miles.
- 5 a. He takes 4 hours to travel a distance of 80 kilometres.
- 5 b. It takes 3 hours to travel a distance of 2880 kilometres.
- 6 a. Its average speed is 640 kilometres per hour.
- 6 b. It can travel 336 kilometres in 4 hours.

HOW FAR CAN IT GO, HOW LONG DOES THE TRIP TAKE, OR WHAT IS THE AVERAGE SPEED - USING QUARTER HOURS

7.

- a) An airplane flies 2700 miles in 3<sup>3</sup>/<sub>4</sub> hours. What is its average speed in miles per hour?
- b) Pete rides his bike with a constant speed of 8 km/h. How far can he travel in 15 minutes?

8.

- a. A minibus drives with a constant speed of 60 km/h. How far can it travel in 3 1/2 hours?
- b. Noah rides his motorcycle with a constant speed of 112 km/h. How far can he travel in 4 hours 45 minutes?

9.

- a. Bob roller skates with a constant speed of 8 km/h. How far can he travel in 45 minutes?
- b. An airplane flies 560 miles in 1 hour. What is its average speed in miles per hour?

#### Answer Key

- 7a. Its average speed is 720 miles per hour.
- 7 b. He can travel 2 kilometres in 15 minutes.
- 8 a. It can travel 210 kilometres in  $3\frac{1}{2}$  hours.
- 8 b. He can travel 532 kilometres in 4 hours 45 minutes.
- 9 a. He can travel 6 kilometres in 45 minutes.
- 9 b. Its average speed is 560 miles per hour.

How far can it go, how long does the trip take, or what is the average speed - time to the 5-minute intervals

#### 10.

- a. Pete rides his horse 41 km in 3 5/12 hours. What is his average speed in kilometres per hour?
- b. Grace rides her bike 60 km in 3 hours 20 minutes. What is her average speed in kilometres per hour?

11.

- a. An airplane flies 1700 km in 2 hours 50 minutes. What is its average speed in kilometres per hour?
- b. Bob rides his motorcycle 125 miles in 2 hours. What is his average speed in miles per hour?

#### 12.

- a. Nancy drives her car with a constant speed of 96 km/h. How far can she travel in 3 hours 15 minutes?
- b. David roller skates 30 km in 1 hour 40 minutes. What is his average speed in kilometres per hour?

#### Answer Key

- 10 a. His average speed is 12 kilometres per hour.
- 10 b. Her average speed is 18 kilometres per hour.
- 11 a. Its average speed is 600 kilometres per hour.
- 11 b. His average speed is 60 miles per hour.
- 12 a. She can travel 312 kilometres in 3 hours 15 minutes.
- 12 b. His average speed is 18 kilometres per hour.

#### PROBLEMS INVOLVING A CONVERSION OF MINUTES TO HOURS

13.

- a. An airplane flies 3515 miles in 285 minutes. What is its average speed in miles per hour?
- b. An airplane flies 150 miles in 15 minutes. What is its average speed in miles per hour?
- 14.
- a. An airplane flies 1050 km in 105 minutes. What is its average speed in kilometres per hour?
- b. Sarah rides her horse 15 km in 75 minutes. What is her average speed in kilometres per hour?

15.

- a. Emily drives her car with a constant speed of 44 miles per hour. How far can she travel in 225 minutes?
- b. David rides his motorcycle 119 miles in 105 minutes. What is his average speed in miles per hour?

Answer Key

13 a. av speed= 740 miles per hour.

13 b. av speed= 600 miles per hour.

14 a. av speed= 600 kilometres per hour.

14 b. av speed= 12 kilometres per hour.

15 a. She can travel 165 miles in 225 minutes.15 b. av speed= 68 miles per hour.

#### TIME IS GIVEN TO THE $\frac{1}{4}$ OF AN HOUR

16.

- a. Emily roller skates 6 km in 30 minutes. What is her average speed in kilometres per hour?
- b. An airplane flies 825 miles in 1 hour 15 minutes. What is its average speed in miles per hour?

17.

- a. Cindy rides her bike 26 km in 3  $\frac{1}{4}$  hours. What is her average speed in kilometres per hour?
- b. Grace rides her bike 60 miles in 3 <sup>3</sup>/<sub>4</sub> hours. What is her average speed in miles per hour?

18.

- a. An airplane flies 420 km in  $\frac{1}{2}$  hour. What is its average speed in kilometres per hour?
- b. A train travels 78 miles in 1 hour 30 minutes. What is its average speed in miles per hour?

Answer Key

- 16 a. av speed= 12 kilometres per hour.
- 16 b. av speed= 660 miles per hour.
- 17 a. av speed= 8 kilometres per hour.
- 17 b. av speed= 16 miles per hour.
- 18 a. av speed= 840 kilometres per hour.
- 18 b. av speed= 52 miles per hour.

http://www.homeschoolmath.net/worksheets/speed\_time\_distance.php

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