

- 1 Big Bird can walk  $3\frac{1}{4}$  kilometres in one hour.

At this speed, how many kilometres will Big Bird walk in  $1\frac{2}{3}$  hours?

- A  $6\frac{5}{12}$  kilometres                      D  $5\frac{1}{2}$  kilometres  
B  $6\frac{1}{4}$  kilometres                        E  $5\frac{5}{12}$  kilometres  
C  $5\frac{2}{3}$  kilometres

- 2 Prince Charming can ride his horse at a rate of  $2\frac{1}{2}$  kilometres per hour.

If it takes Prince Charming 6 minutes to ride his horse from his castle to Snow White's cottage, how far is Prince Charming's castle from Snow White's cottage?

- A 200 metres                                D 350 metres  
B 250 metres                                E 400 metres  
C 280 metres

- 3 A school bus travelled 300 kilometres in 6 hours.

If it was traveling at a constant speed the whole time, what was the speed of the bus?

- A 75 kilometres per hour                D 50 kilometres per hour  
B 60 kilometres per hour                E 40 kilometres per hour  
C 55 kilometres per hour

- 4 A car travels at 56 kilometres per hour.

At this speed, how far can the car travel in  $3\frac{3}{4}$  hours?

- A 210 kilometres                      D 180 kilometres  
B 200 kilometres                      E 160 kilometres  
C 190 kilometres

- 5 Benny rides his bike at a speed of 35 kilometres per hour.

At this speed, how long will it take him to travel 525 kilometres?

- A 10 hours                                  D 16 hours  
B 12 hours                                  E 18 hours  
C 15 hours

- 6 Elmo joined a fun run for charity.

He finished the race in exactly 2 hours running 15 kilometres per hour.

How long was the race?

- A 15 kilometres                      D 30 kilometres  
B 20 kilometres                      E 40 kilometres  
C 25 kilometres

- 7 Legolas can fire an arrow at a rate of 140 kilometres per hour.

If Legolas fired an arrow and it hit the target in 3 minutes, how far was the target?

- A 7 kilometres                      D 4 kilometres  
B 6 kilometres                      E 3 kilometres  
C 5 kilometres

- 8 Quicksilver ran at a speed of 120 kilometres per hour for 3 hours and at 150 kilometres per hour for 2 hours.

What was Quicksilver's average speed for the entire run?

- A 140 kilometres per hour                      D 132 kilometres per hour  
B 138 kilometres per hour                      E 130 kilometres per hour  
C 135 kilometres per hour

- 9 Bart walks at a rate of 4.2 kilometres per hour.

At this rate, how far will Bart walk in 2 hours 30 minutes?

- A 10 kilometres                                      D 12.5 kilometres  
B 10.5 kilometres                                    E 15 kilometres  
C 12 kilometres

- 10 The Batmobile travelled 124 kilometres in 1 hour 33 minutes.

What was the average speed of the Batmobile for the entire trip?

- A 65 kilometres per hour                      D 75 kilometres per hour  
B 70 kilometres per hour                      E 80 kilometres per hour  
C 72 kilometres per hour

- 11 It took the train 2.5 hours to travel 150 kilometres from Richville to Green Meadows.

What was the average speed of the train for the entire journey?

- A 50 kilometres per hour                      D 70 kilometres per hour  
B 55 kilometres per hour                      E 80 kilometres per hour  
C 60 kilometres per hour

**12** If a bee can fly 2.5 metres in one minute, what is the speed of the bee in metres per hour?

- A** 25 metres per hour
- B** 50 metres per hour
- C** 75 metres per hour
- D** 150 metres per hour
- E** 300 metres per hour

**13** Kenny rides his bike 16 kilometres each day going to school.

If Kenny's average speed biking to school is 12 kilometres per hour, how long does it take Kenny to get to the school?

- A** 1 hour 15 minutes
- B** 1 hour 20 minutes
- C** 1 hour 25 minutes
- D** 1 hour 30 minutes
- E** 1 hour 45 minutes

**14** A jumbo jet can travel 567 kilometres per hour.

At this rate, how far can the jumbo jet travel in four hours?

- A** 2 144 kilometres
- B** 2 156 kilometres
- C** 2 164 kilometres
- D** 2 196 kilometres
- E** 2 268 kilometres

**15** Anthony travelled at 42 kilometres per hour for 40 minutes and at 48 kilometres per hour for 50 minutes.

How far did Anthony travel?

- A** 68 kilometres
- B** 65 kilometres
- C** 64 kilometres
- D** 62 kilometres
- E** 60 kilometres

- 16** Harry rode the bus from Greendale to Riverdale, which is a distance of 112 kilometres.

If it took the bus 80 minutes for the trip, what was the average speed of the bus for the trip?

- A** 14 kilometres per hour                      **D** 124 kilometres per hour  
**B** 80 kilometres per hour                      **E** 140 kilometres per hour  
**C** 84 kilometres per hour

- 17** It took the train 20.5 hours to travel from Central City to Gotham City at an average speed of 86 kilometres per hour.

What is the distance between Central City and Gotham City?

- A** 1 686 kilometres                      **D** 1 763 kilometres  
**B** 1 716 kilometres                      **E** 1 820 kilometres  
**C** 1 744 kilometres

- 18** It took Elmo 4 hours to walk from his house to Bert's house at a rate of 3 kilometres per hour.

How far is it between Elmo's house and Bert's house?

- A** 10 kilometres                      **D** 15 kilometres  
**B** 12 kilometres                      **E** 16 kilometres  
**C** 14 kilometres

- 19** If the Imperial Death Star travelled for five hours at 4 light-years per hour, how far did the Imperial Death Star travel?

- A** 36 light-years                      **D** 24 light-years  
**B** 30 light-years                      **E** 20 light-years  
**C** 25 light-years

**20** If Charlie Brown rode his bike 6 kilometres at a rate of 2 kilometres per hour. How long was Charlie Brown biking?

**A** 3 hours

**D** 9 hours

**B** 4 hours

**E** 12 hours

**C** 6 hours

**21** The distance between Eddy's house and Danny's house is 36 kilometres.

If it took William 3 hours to run from Eddy's house to Danny's house, how fast was William running?

**A** 10 kilometres per hour

**D** 16 kilometres per hour

**B** 12 kilometres per hour

**E** 18 kilometres per hour

**C** 15 kilometres per hour

**22** Mario and Luigi drove for three hours at a rate of 30 kilometres per hour and then drove for another two hours at a rate of 50 kilometres per hour.

How far did Mario and Luigi travel?

**A** 80 kilometres

**D** 180 kilometres

**B** 120 kilometres

**E** 190 kilometres

**C** 160 kilometres

**23** Jennifer drove for  $5\frac{1}{2}$  hours at an average speed of 45 kilometres per hour.

How far did Jennifer drive?

**A** 236 kilometres

**D** 250 kilometres

**B** 242.5 kilometres

**E** 252.5 kilometres

**C** 247.5 kilometres

**24** Kermit the Frog walks at a rate of 4 kilometres per hour.

At this rate, how long will it take Kermit to walk one kilometre?

- A** 4 minutes
- B** 8 minutes
- C** 10 minutes
- D** 12 minutes
- E** 15 minutes

**25** Jeff leaves the library at 12:00 PM and travels in a straight route at a constant speed of 20 kilometres per hour.

Two hours later, Nelly leaves the same library and travels along the same route as Jeff at a constant speed.

If Nelly overtakes Jeff at 4:00 PM, how fast was Nelly travelling?

- A** 15 kilometres per hour
- B** 24 kilometres per hour
- C** 30 kilometres per hour
- D** 35 kilometres per hour
- E** 40 kilometres per hour

**26** Flying at a constant speed of 48 kilometres per hour, how many minutes will it take Superman to fly a distance of 32 kilometres?

- A**  $\frac{2}{3}$  of a minute
- B**  $1\frac{1}{2}$  minutes
- C** 40 minutes
- D** 45 minutes
- E** 2 400 minutes

**27** If Greg bikes at a constant speed of 12 kilometres per hour, how many minutes will it take him to bike a distance of 24 kilometres?

- A** 1
- B** 2
- C** 30
- D** 60
- E** 120

**28** Ecto-1 and the Mystery Machine travelled the same 80-kilometre route.

It took Ecto-1 2 hours to travel the route.

If the Mystery Machine travelled at an average speed that was 50 percent faster than the average speed of Ecto-1, how long did it take the Mystery Machine to travel the route?

- A**  $\frac{2}{3}$  of an hour                      **D**  $1\frac{3}{5}$  hours  
**B** 1 hour                                      **E** 3 hours  
**C**  $1\frac{1}{3}$  hours

**29** A rectangular park has a perimeter of 10 kilometres.

Jack and Jill ran around the park in the same direction and at constant speeds of 8 kilometres per hour and 6 kilometres per hour, respectively.

If they started running at the same time and at the same point in the park, how many hours later did Jack complete exactly 1 more lap than Jill?

- A** 3 hours                                      **D** 6 hours  
**B** 4 hours                                      **E** 7 hours  
**C** 5 hours

**30** The International Space Station orbits the Earth at a speed of 8 kilometres per second.

How fast is the International Space Station orbiting the Earth in kilometres per hour?

- A** 480 kilometres per hour                      **D** 28 800 kilometres per hour  
**B** 2 880 kilometres per hour                      **E** 48 000 kilometres per hour  
**C** 4 800 kilometres per hour



## FREE-RESPONSE QUESTIONS

- 31** The Flash and Quicksilver started running towards each other at the same time from opposite ends of a straight highway 300 kilometres apart.

If the Flash ran at a constant speed of 70 kilometres per hour while Quicksilver ran at a constant speed of 50 kilometres per hour, how long did it take for the two of them to meet?

- 32** It took the bus 7 hours to travel from Sunnydale to Sunset Valley.

If the bus travelled the first 300 kilometres of the trip at an average speed of 60 kilometres per hour, what was the average speed of the bus on the final 200 kilometres of the trip?

- 33** Bert and Elmo started from opposite ends of a 28-kilometre road and began running toward each other at the same time.

Bert ran at a constant speed of 4 kilometres per hour while Elmo ran at a constant speed of 3 kilometres per hour.

How far did Bert run when he met Elmo on the road?

- 34** Had Jake run the marathon at 1.5 times as fast as he did, it would have taken him 6 hours to finish the marathon.

How many hours did Jake finish the marathon?

- 35** Harry rode his broomstick from Privet Drive to Hogwarts at an average speed of 80 kilometres per hour and then returned to Privet Drive along the same route at an average speed of 70 kilometres per hour.

If the return trip took 30 minutes longer than the trip going to Hogwarts, what was the distance between Privet Drive and Hogwarts?

- 36** A fish can swim at a rate of 5 metres per second.

At this rate, how many metres can the fish swim in one hour?

**37** Kenny can drive  $K$  kilometres in 50 minutes.

At this rate, how many minutes will it take Kenny to drive 10 kilometres in terms of  $K$ ?

**38** The distance between National City and Star City is 110 kilometres.

Clark Kent started driving from Star City to National City at 7:00 AM at a speed of 20 kilometres per hour.

Lois Lane started driving from National City to Star City at 8:00 AM, along the same route, at a speed of 25 kilometres per hour.

At what time will the two of them meet?

**39** Bob will be driving from his house to his office, which is 28 kilometres away.

How fast must Bob be driving if he needs to get to his office in 30 minutes?

**40** Archie and Jughead left Riverdale at 9:00 AM and traveled to Greendale along the same highway.

Archie drives at 30 kilometres per hour while Jughead drives at 40 kilometres per hour.

After travelling 240 kilometres, Jughead's car broke down and he had to stop.

At what time will Archie's car reach Jughead's car?