

## **Worksheet 1 (Speed Time and Distance and Linear Equation One variable)**

### **Speed Time and Distance**

1. Find speed when, distance is 142 km and time is 2 hours.
2. Find out the distance covered when, speed is 960 km/hour and time is 1 hour 50 minutes.
3. Determine the time taken when, distance is 7150 km and speed is 780 km/hr.
4. If distance travelled by a train is 495 km in 4 hours 30 minutes, what is its speed?
5. A cyclist covers 950 m in 5 minutes. Find his speed in km/ hour.
6. The speed of the train is 72 km per hour. Find its speed in metre per second.
7. Express the speed of 60 m per minute in km per hour.
8. A man runs at the speed of 10 km/hr. How much time will he take to cover 750 metres?
9. Aaron ran 500 metre in 100 Seconds. Find the speed in km per hour.
10. A cyclist travels at a speed of 20 km/hour. How far will he travel in 50 minutes?
11. A car travels 300 km in 5.5 hrs and another 400 km in 5.5 hrs. Find the average speed of the car during the entire journey.
12. A motorist travelled the distance between two towns, which is 65 km, in 2 hours and 10 minutes. Find his speed in metre per minute.
13. A racing car covered 600 km in 3 hours 20 minutes. Find its speed in metre per second. How much distance will the car cover in 50 sec?
14. Rohit goes 350 km in 5 hours. Find:
  - (i) his speed
  - (ii) the distance covered by Rohit in 6.2 hours
  - (iii) the time taken by him to cover 210 km.
15. I travel a distance of 10 km and come back in  $2\frac{1}{2}$  hours. What is my speed?
16. The speed of sound in air is about 330 ms<sup>-1</sup>. Express this speed in kmh<sup>-1</sup>. How long will the sound take to travel 99 km?
17. A train 120 m long passes a railway platform 160 m long in 14 sec. How long will it take to pass another platform which is 100 m long?
18. Which is greater: a speed of 45 km/h or a speed of 12.25 m/sec?  
How much is the distance travelled by each in 2 seconds?
19. A train 180 m long is running at a speed of 90 km/h. How long will it take to pass a railway signal?
20. A train whose length is 150 m, passes a telegraph pole in 10 sec. Find the speed of the train in km/h

### **Linear Equation One Variable**

#### **1. Write each of the following statements as an equation:**

- (i) 5 times a number equals 40.
- (ii) A number increased by 8 equals 15.
- (iii) 25 exceeds a number by 7.
- (iv) A number exceeds 5 by 3.
- (v) 5 subtracted from thrice a number is 16.
- (vi) If 12 is subtracted from a number, the result is 24.
- (vii) Twice a number subtracted from 19 is 11.
- (viii) A number divided by 8 gives 7.
- (ix) 3 less than 4 times a number is 17.
- (x) 6 times a number is 5 more than the number.

#### **2. Solve the following**

- (i)  $x - 7 = 14$
- (ii)  $2y = 18$
- (iii)  $11 + 3x = 17$
- (iv)  $2x - 3 = 13$
- (v)  $12y - 30 = 6$
- (vi)  $2z/3 = 8$