1. A machine can complete 1/16 of a job in 1 minute.
   1. How much work will it complete in 6 minutes?
   2. If 75 such machines work together, how much work will they complete in 49 minutes?
   3. How many complete jobs will be finished?
2. A circle is perfectly inscribed inside a square. The area of the circle is 154 square units.
   1. What is the radius of the circle?
   2. What is the area of the square?
   3. Find the area of the remaining portion of the square that lies outside the circle.
3. A person spends 25% of his income on rent, 1/3 of his income on food, and still has ₹8 left. If his total income is ₹X, find the value of X.
4. A person invests a sum of money in three different schemes offering interest rates of 20%, 50%, and 30% respectively. He invests the money in the ratio 2:5:3. If the total interest earned is ₹510, find the total amount invested.
5. The present age of a mother is 3 years more than 3 times the present age of her daughter. After 3 years, the mother’s age will be 10 years more than twice the daughter’s age at that time. Find the present age of the daughter.
6. The cost of 20 pens is ₹10 and the cost of 15 pencils is ₹10.
   1. Find the cost of one pen and one pencil.
   2. Calculate the percentage increase in the price of a pencil compared to the price of a pen.
7. Three different vehicles are moving at speeds of 40 km/h, 50 km/h, and 90 km/h respectively. Convert their speeds into meters per second. Also, if the second vehicle covers 300 meters in 12 seconds, find its actual speed in m/s and km/h. Verify whether it matches the converted value.
8. At what angle will the hands of a clock be separated when the time is 3:10?
9. Two persons A and B are standing 100 meters apart. Person A starts walking towards person B at a speed of 2 m/s. Person B also starts walking towards A at a speed of 2 m/s, but starts after a delay of 5 seconds. At what distance from A’s starting point will they meet?
10. If a workman completes 1/h part of a job in one hour and his efficiency is 40%, find the total number of hours (h) required to complete the full work.