

Chapter -- 44

1. Satyajit Ray 2. Dev Anand 3. Balraj Sahni 4. Sunil Dutt 5. Kalki koechlin

Chapter --- 46

1. When it has a hole in it 2. In Finland 3. Daylight 4. A leek 5. Needle 6. Race car
7. A Reflection 8. The letter 'E'

Chapter --- 47

- A. 1. Milk 2. Tomato 3. Rubber 4. Fruits

- B. 1.  2.  3.  4.  5.  6. 

Chapter --- 48

- A. 1. Slip 2. Pupil 3. Junk 4. Bumper

- B. 1. bottle 2. horse 3. pin 4. ground

- C. 1. $72 \times 4 / 1 = 288 + 12 = 300$

2. $6x - 45 = x$

$5x = 45$

$x = 45/5 = 9$

Chapter -- 49

- A. 1. Part filled by x in 1 hr = $1/35$

Part filled by y in 1 hr = $1/45$

Part filled by x+ y in hr = $1/35 + 1/45 = 16/315$

$= 1/19.6875 = 19.6875 \text{ hours}$

2. Speed = 20 km/hr

$= (20 \times 5/18) \text{ m/s} = 50/9 \text{ m/s}$

Time taken to cover 400m = Distance / Speed = $400 \times 9/50 = 72 \text{ sec}$

$= 72/60 \text{ min} = 6/5 \text{ min}$

3. If Tiya takes 4 min,
Raj takes 3 min
∴ If Tiya takes 36 min, then

$$\text{Raj will take } \frac{3}{4} \times 36 = 27 \text{ min}$$

4. $\text{Speed of train} = 30 \times \frac{5}{18} = \frac{25}{3} \text{ m/s}$

Distance moved in passing the standing person = 100 m;

$$\text{Required time taken} = \frac{\text{Distance moved}}{\text{Speed}} = 100 \times \frac{3}{25} = 12 \text{ sec.}$$

5. $\text{Rate in still water} = \frac{1}{2} (10 + 7) \text{ km/hr} = 8.5 \text{ km/hr}$

$$\text{Speed in still water} = \frac{1}{2} (a + b) \text{ km/hr}$$

$$\text{Rate of current} = \frac{1}{2} (10 - 7) = 1.5 \text{ km/hr}$$

$$\text{Rate of stream} = \left(\frac{1}{2} (a - b) \right) \text{ km/hr}$$

- B. 1. Principal 2. Compound interest 3. Median 4. Centroid

I.Q. Test 1 (Page 70)

A. 1. (a) 2. (b)

B. 1. (a) 2. (a)

I.Q. Test 2 (Page 71)

A. 1. (a) 2. (b)

B. 1. (a) 2. (b)

Model Test Paper 2 (Page 72)

A. 1. Honshu 2. Sicily 3. Nauru 4. Malala Yousafzai

B. 1. Landscape 2. Operating System 3. Geostationary satellite
4. Acoustics

C. 1. Oxygen 2. Chromosomes 3. John C Jacob 4. Angola

D. 1. (b) 2. (d) 3. (a) 4. (c)

E. 1. Rafael Nadal 2. Jinder Mahal 3. Stephen Hawking
4. Sunil Dutt