Worksheet: Proportional Reasoning-2

Uttar Pradesh State Board · Class 8 · Mathematics · 8 questions · 14 marks

Name: _____	Date: _____	Score: _____ / 14

Q1. ₹720 is shared among three friends in the ratio 2 : 3 : 4. How much does the friend with the largest share receive? *[1 mark]*

A) ₹240

B) ₹180

C) ₹320

D) ₹360

Q2. On a map with RF 1 : 50,00,000, two towns are 4 cm apart. What is the geographical distance between them? *[1 mark]*

A) 50 km

B) 2000 km

C) 20 km

D) 200 km

Q3. In a pie chart of 720 people, one slice measures 45°. How many people does that slice represent? *[1 mark]*

A) 90

B) 180

C) 45

D) 160

Q4. Which of these pairs of quantities is in INVERSE proportion? *[1 mark]*

A) Litres of petrol and the distance a car travels

B) Number of taps filling a tank and the time taken

C) Metres of cloth bought and the price paid

D) Pages in a book and the time to read it at fixed speed

Q5. If x and y are in inverse proportion and x = 15 when y = 8, what is y when x = 20? *[1 mark]*

A) 24

B) 10.67

C) 6

D) 37.5

Q6. A hostel has enough food to feed 45 students for 16 days. If 15 students leave the hostel, how many days will the same food last? State one assumption you are making. *[3 marks]*

Q7. Concrete is mixed as cement : sand : gravel :: 1 : 1.5 : 3. How many units of each are needed to make 55 units of concrete? Show the check. *[3 marks]*

Q8. Tap A fills a tank in 4 hours and tap B fills the same tank in 6 hours. If both run together, how long does the tank take to fill? Explain why the answer cannot be 5 hours. *[3 marks]*