# VERBAL REASONING PUZZLE(ENGLISH)

**Q1: A train travels 150 km in 3 hours. What is its speed in km/hr?**
Long Solution: To find the speed, we use the formula: Speed = Distance/Time. So, Speed = 150/3 = 50 km/hr.

Short Solution: Speed = Distance/Time. So, Speed = 150/3 = 50 km/hr.

**Q2: If 6 apples cost $24, how much do 10 apples cost?**
Long Solution: Let the cost of 1 apple be x dollars. Then, 6 apples cost 6x dollars. Given that 6x = $24, so x = $4. Hence, 10 apples will cost 10 * $4 = $40.

Short Solution: Cost of 1 apple = $24/6 = $4. Hence, 10 apples will cost 10 * $4 = $40.

Q3**: If 8 workers can build a wall in 6 days, how many days will it take for 12 workers to build the same wall?**
Long Solution: Let d be the number of days needed. The amount of work done is constant, so (8 workers) * (6 days) = (12 workers) * d. Solving for d, we get d = (8 * 6) / 12 = 4 days.

Short Solution: (8 workers) * (6 days) = (12 workers) * d. Solving for d, we get d = (8 * 6) / 12 = 4 days.

**Q4: If a cube has a volume of 64 cubic cm, what is the length of one side?**
Long Solution: The volume of a cube is given by Volume = Side^3. So, Side = cube root of Volume = cube root of 64 = 4 cm.

Short Solution: Side = cube root of Volume = cube root of 64 = 4 cm.

**Q5: If a shopkeeper sells an item for $75 and makes a profit of 25%, what is the cost price of the item?**
Long Solution: Let the cost price be x dollars. Selling price = Cost price + Profit. So, $75 = x + 0.25x = 1.25x. Solving for x, we get x = $60.

Short Solution: Cost price = Selling price / (1 + Profit %). So, Cost price = $75 / (1 + 0.25) = $60.

**Q6: A car travels 240 miles using 15 gallons of gas. What is its mileage in miles per gallon (mpg)?**
Long Solution: Mileage = Distance / Fuel used = 240 miles / 15 gallons = 16 mpg.

Short Solution: Mileage = Distance / Fuel used = 240 miles / 15 gallons = 16 mpg.

**Q7: If 4 pencils cost $1.20, how much do 10 pencils cost?**

Long Solution: Let the cost of 1 pencil be x dollars. Then, 4 pencils cost 4x dollars. Given that 4x = $1.20, so x = $0.30. Hence, 10 pencils will cost 10 * $0.30 = $3.

Short Solution: Cost of 1 pencil = $1.20/4 = $0.30. Hence, 10 pencils will cost 10 * $0.30 = $3.

**Q8: If 3 pipes can fill a tank in 8 hours, how many hours will it take for 6 pipes to fill the same tank?**
Long Solution: Let h be the number of hours needed. The amount of work done is constant, so (3 pipes) * (8 hours) = (6 pipes) * h. Solving for h, we get h = (3 * 8) / 6 = 4 hours.

Short Solution: (3 pipes) * (8 hours) = (6 pipes) * h. Solving for h, we get h = (3 * 8) / 6 = 4 hours.

**Q9: If a square has an area of 36 square units, what is the length of one side?**
Long Solution: The area of a square is given by Area = Side^2. So, Side = square root of Area = square root of 36 = 6 units.

Short Solution: Side = square root of Area = square root of 36 = 6 units.

**Q10: If a laptop is sold for $800 and the seller makes a loss of 20%, what was the buying price of the laptop?**
Long Solution: Let the buying price be x dollars. Selling price = Buying price - Loss. So, $800 = x - 0.20x = 0.80x. Solving for x, we get x = $1000.

Short Solution: Buying price = Selling price / (1 - Loss %). So, Buying price = $800 / (1 - 0.20) = $1000.

**Q11: A car travels 360 miles using 15 gallons of gas. What is its mileage in miles per gallon (mpg)?**
Long Solution: Mileage = Distance / Fuel used = 360 miles / 15 gallons = 24 mpg.

Short Solution: Mileage = Distance / Fuel used = 360 miles / 15 gallons = 24 mpg.

**Q12: If 5 apples cost $10, how much do 8 apples cost?**
Long Solution: Let the cost of 1 apple be x dollars. Then, 5 apples cost 5x dollars. Given that 5x = $10, so x = $2. Hence, 8 apples will cost 8 * $2 = $16.

Short Solution: Cost of 1 apple = $10/5 = $2. Hence, 8 apples will cost 8 * $2 = $16.

**Q13: If 4 workers can build a wall in 5 days, how many days will it take for 6 workers to build the same wall?**

Long Solution: Let d be the number of days needed. The amount of work done is constant, so (4 workers) * (5 days) = (6 workers) * d. Solving for d, we get d = (4 * 5) / 6 = 10/3 days.

Short Solution: (4 workers) * (5 days) = (6 workers) * d. Solving for d, we get d = (4 * 5) / 6 = 10/3 days.

**Q14: If a cube has a volume of 125 cubic cm, what is the length of one side?**
Long Solution: The volume of a cube is given by Volume = Side^3.
So, to find the length of one side, we need to find the cube root of the volume. Thus, Side = cube root of Volume = cube root of 125 = 5 cm.

Short Solution: Side = cube root of Volume = cube root of 125 = 5 cm.

**Q15: If a shopkeeper sells an item for $90 and makes a profit of 20%, what is the cost price of the item?**
Long Solution: Let the cost price be x dollars. Selling price = Cost price + Profit. So, $90 = x + 0.20x = 1.20x. Solving for x, we get x = $75.

Short Solution: Cost price = Selling price / (1 + Profit %). So, Cost price = $90 / (1 + 0.20) = $75.

**Q16: A car travels 300 miles using 20 gallons of gas. What is its mileage in miles per gallon (mpg)?**
Long Solution: Mileage = Distance / Fuel used = 300 miles / 20 gallons = 15 mpg.

Short Solution: Mileage = Distance / Fuel used = 300 miles / 20 gallons = 15 mpg.

**Q17: If 3 pencils cost $0.75, how much do 12 pencils cost?**
Long Solution: Let the cost of 1 pencil be x dollars. Then, 3 pencils cost 3x dollars. Given that 3x = $0.75, so x = $0.25. Hence, 12 pencils will cost 12 * $0.25 = $3.

Short Solution: Cost of 1 pencil = $0.75/3 = $0.25. Hence, 12 pencils will cost 12 * $0.25 = $3.

**Q18: If 5 workers can build a wall in 10 days, how many days will it take for 8 workers to build the same wall?**
Long Solution: Let d be the number of days needed. The amount of work done is constant, so (5 workers) * (10 days) = (8 workers) * d. Solving for d, we get d = (5 * 10) / 8 = 6.25 days.

Short Solution: (5 workers) * (10 days) = (8 workers) * d. Solving for d, we get d = (5 * 10) / 8 = 6.25 days.

**Q19: If a square has an area of 49 square units, what is the length of one side?**

Long Solution: The area of a square is given by Area = Side^2. So, Side = square root of Area = square root of 49 = 7 units.
Short Solution: Side = square root of Area = square root of 49 = 7 units.

**Q20: If a laptop is sold for $1200 and the seller makes a loss of 10%, what was the buying price of the laptop?**
Long Solution: Let the buying price be x dollars. Selling price = Buying price - Loss. So, $1200 = x - 0.10x = 0.90x. Solving for x, we get x = $1333.33.

Short Solution: Buying price = Selling price / (1 - Loss %). So, Buying price = $1200 / (1 - 0.10) = $1333.33.

**Q21: A car travels 400 miles using 20 gallons of gas. What is its mileage in miles per gallon (mpg)?**
Long Solution: Mileage = Distance / Fuel used = 400 miles / 20 gallons = 20 mpg.

Short Solution: Mileage = Distance / Fuel used = 400 miles / 20 gallons = 20 mpg.

**Q22: If 4 apples cost $8, how much do 9 apples cost?**
Long Solution: Let the cost of 1 apple be x dollars. Then, 4 apples cost 4x dollars. Given that 4x = $8, so x = $2. Hence, 9 apples will cost 9 * $2 = $18.

Short Solution: Cost of 1 apple = $8/4 = $2. Hence, 9 apples will cost 9 * $2 = $18.

**Q23: If 6 workers can build a wall in 8 days, how many days will it take for 9 workers to build the same wall?**
Long Solution: Let d be the number of days needed. The amount of work done is constant, so (6 workers) * (8 days) = (9 workers) * d. Solving for d, we get d = (6 * 8) / 9 = 5.33 days.

Short Solution: (6 workers) * (8 days) = (9 workers) * d. Solving for d, we get d = (6 * 8) / 9 = 5.33 days.

**Q24: If a cube has a volume of 343 cubic cm, what is the length of one side?**
Long Solution: The volume of a cube is given by Volume = Side^3. So, Side = cube root of Volume = cube root of 343 = 7 cm.

Short Solution: Side = cube root of Volume = cube root of 343 = 7 cm.

**Q25: If a shopkeeper sells an item for $100 and makes a profit of 25%, what is the cost price of the item?**

Long Solution: Let the cost price be x dollars. Selling price = Cost price + Profit. So, $100 = x + 0.25x = 1.25x. Solving for x, we get x = $80.
Short Solution: Cost price = Selling price / (1 + Profit %). So, Cost price = $100 / (1 + 0.25) = $80.

**Q26: A car travels 450 miles using 25 gallons of gas. What is its mileage in miles per gallon (mpg)?**
Long Solution: Mileage = Distance / Fuel used = 450 miles / 25 gallons = 18 mpg.

Short Solution: Mileage = Distance / Fuel used = 450 miles / 25 gallons = 18 mpg.

**Q27: If 3 pencils cost $0.90, how much do 15 pencils cost?**
Long Solution: Let the cost of 1 pencil be x dollars. Then, 3 pencils cost 3x dollars. Given that 3x = $0.90, so x = $0.30. Hence, 15 pencils will cost 15 * $0.30 = $4.50.

Short Solution: Cost of 1 pencil = $0.90/3 = $0.30. Hence, 15 pencils will cost 15 * $0.30 = $4.50

**Q28: If 6 workers can build a wall in 12 days, how many days will it take for 4 workers to build the same wall?**
Long Solution: Let d be the number of days needed. The amount of work done is constant, so (6 workers) * (12 days) = (4 workers) * d. Solving for d, we get d = (6 * 12) / 4 = 18 days.

Short Solution: (6 workers) * (12 days) = (4 workers) * d. Solving for d, we get d = (6 * 12) / 4 = 18 days.

**Q29: If a square has an area of 81 square units, what is the length of one side?**
Long Solution: The area of a square is given by Area = Side^2. So, Side = square root of Area = square root of 81 = 9 units.
Short Solution: Side = square root of Area = square root of 81 = 9 units.

**Q30: If a laptop is sold for $1500 and the seller makes a loss of 15%, what was the buying price of the laptop?**
Long Solution: Let the buying price be x dollars. Selling price = Buying price - Loss. So, $1500 = x - 0.15x = 0.85x. Solving for x, we get x = $1764.71.

Short Solution: Buying price = Selling price / (1 - Loss %). So, Buying price = $1500 / (1 - 0.15) = $1764.71.

**Q31: If 5 apples cost $15, how much do 12 apples cost?**
Long Solution: Let the cost of 1 apple be x dollars. Then, 5 apples cost 5x dollars. Given that 5x = $15, so x = $3. Hence, 12 apples will cost 12 * $3 = $36.

Short Solution: Cost of 1 apple = $15/5 = $3. Hence, 12 apples will cost 12 * $3 = $36.

**Q32: If 8 workers can build a wall in 10 days, how many days will it take for 5 workers to build the same wall?**

Long Solution: Let d be the number of days needed. The amount of work done is constant, so (8 workers) * (10 days) = (5 workers) * d. Solving for d, we get d = (8 * 10) / 5 = 16 days.

Short Solution: (8 workers) * (10 days) = (5 workers) * d. Solving for d, we get d = (8 * 10) / 5 = 16 days.

**Q333: If a cube has a volume of 512 cubic cm, what is the length of one side?**

Long Solution: The volume of a cube is given by Volume = Side^3. So, Side = cube root of Volume = cube root of 512 = 8 cm.

Short Solution: Side = cube root of Volume = cube root of 512 = 8 cm.

**Q4: If a shopkeeper sells an item for $120 and makes a profit of 30%, what is the cost price of the item?**

Long Solution: Let the cost price be x dollars. Selling price = Cost price + Profit. So, $120 = x + 0.30x = 1.30x. Solving for x, we get x = $92.31.

Short Solution: Cost price = Selling price / (1 + Profit %). So, Cost price = $120 / (1 + 0.30) = $92.31.

**Q35: A car travels 500 miles using 25 gallons of gas. What is its mileage in miles per gallon (mpg)?**

Long Solution: Mileage = Distance / Fuel used = 500 miles / 25 gallons = 20 mpg.

Short Solution: Mileage = Distance / Fuel used = 500 miles / 25 gallons = 20 mpg.

**Q36: If 4 pencils cost $1, how much do 10 pencils cost?**

Long Solution: Let the cost of 1 pencil be x dollars. Then, 4 pencils cost 4x dollars. Given that 4x = $1, so x = $0.25. Hence, 10 pencils will cost 10 * $0.25 = $2.50.

Short Solution: Cost of 1 pencil = $1/4 = $0.25. Hence, 10 pencils will cost 10 * $0.25 = $2.50.

**Q37: If 6 workers can build a wall in 15 days, how many days will it take for 9 workers to build the same wall?**

Long Solution: Let d be the number of days needed. The amount of work done is constant, so (6 workers) * (15 days) = (9 workers) * d. Solving for d, we get d = (6 * 15) / 9 = 10 days.

Short Solution: (6 workers) * (15 days) = (9 workers) * d. Solving for d, we get d = (6 * 15) / 9 = 10 days.

**Q38: If a square has an area of 100 square units, what is the length of one side?**
Long Solution: The area of a square is given by Area = Side^2. So, Side = square root of Area = square root of 100 = 10 units.

Short Solution: Side = square root of Area = square root of 100 = 10 units.

**Q39: If a laptop is sold for $800 and the seller makes a loss of 25%, what was the buying price of the laptop?**
Long Solution: Let the buying price be x dollars. Selling price = Buying price - Loss. So, $800 = x - 0.25x = 0.75x. Solving for x, we get x = $1066.67.

Short Solution: Buying price = Selling price / (1 - Loss %). So, Buying price = $800 / (1 - 0.25) = $1066.67.

**Q40: A train travels 200 km in 4 hours. What is its speed in km/hr?**
Long Solution: To find the speed, we use the formula: Speed = Distance/Time. So, Speed = 200/4 = 50 km/hr.

Short Solution: Speed = Distance/Time. So, Speed = 200/4 = 50 km/hr.

**Q41: If 7 apples cost $21, how much do 14 apples cost?**
Long Solution: Let the cost of 1 apple be x dollars. Then, 7 apples cost 7x dollars. Given that 7x = $21, so x = $3. Hence, 14 apples will cost 14 * $3 = $42.

Short Solution: Cost of 1 apple = $21/7 = $3. Hence, 14 apples will cost 14 * $3 = $42.

**Q42: If 4 workers can build a wall in 7 days, how many days will it take for 8 workers to build the same wall?**
Long Solution: Let d be the number of days needed. The amount of work done is constant, so (4 workers) * (7 days) = (8 workers) * d. Solving for d, we get d = (4 * 7) / 8 = 3.5 days.

Short Solution: (4 workers) * (7 days) = (8 workers) * d. Solving for d, we get d = (4 * 7) / 8 = 3.5 days.

**Q43: If a cube has a volume of 216 cubic cm, what is the length of one side?**
Long Solution: The volume of a cube is given by Volume = Side^3. So, Side = cube root of Volume = cube root of 216 = 6 cm.

Short Solution: Side = cube root of Volume = cube root of 216 = 6 cm.

**Q44: If a shopkeeper sells an item for $150 and makes a profit of 20%, what is the cost price of the item?**

Long Solution: Let the cost price be x dollars. Selling price = Cost price + Profit. So, $150 = x + 0.20x = 1.20x. Solving for x, we get x = $125.

Short Solution: Cost price = Selling price / (1 + Profit %). So, Cost price = $150 / (1 + 0.20) = $125.

**Q45: If 5 pencils cost $1.25, how much do 20 pencils cost?**

Long Solution: Let the cost of 1 pencil be x dollars. Then, 5 pencils cost 5x dollars. Given that 5x = $1.25, so x = $0.25. Hence, 20 pencils will cost 20 * $0.25 = $5.

Short Solution: Cost of 1 pencil = $1.25/5 = $0.25. Hence, 20 pencils will cost 20 * $0.25 = $5.

**Q46: If 6 workers can build a wall in 9 days, how many days will it take for 12 workers to build the same wall?**

Long Solution: Let d be the number of days needed. The amount of work done is constant, so (6 workers) * (9 days) = (12 workers) * d. Solving for d, we get d = (6 * 9) / 12 = 4.5 days.

Short Solution: (6 workers) * (9 days) = (12 workers) * d. Solving for d, we get d = (6 * 9) / 12 = 4.5 days.

**Q47: If a square has an area of 64 square units, what is the length of one side?**

Long Solution: The area of a square is given by Area = Side^2. So, Side = square root of Area = square root of 64 = 8 units.

Short Solution: Side = square root of Area = square root of 64 = 8 units.

Q48**: If a laptop is sold for $900 and the seller makes a loss of 10%, what was the buying price of the laptop?**

Long Solution: Let the buying price be x dollars. Selling price = Buying price - Loss. So, $900 = x - 0.10x = 0.90x. Solving for x, we get x = $1000.

Short Solution: Buying price = Selling price / (1 - Loss %). So, Buying price = $900 / (1 - 0.10) = $1000.

**Q49: If 3 apples cost $9, how much do 10 apples cost?**

Long Solution: Let the cost of 1 apple be x dollars. Then, 3 apples cost 3x dollars. Given that 3x = $9, so x = $3. Hence, 10 apples will cost 10 * $3 = $30.

Short Solution: Cost of 1 apple = $9/3 = $3. Hence, 10 apples will cost 10 * $3 = $30.

**Q50: If 8 workers can build a wall in 6 days, how many days will it take for 4 workers to build the same wall?**

Long Solution: Let d be the number of days needed. The amount of work done is constant, so (8 workers) * (6 days) = (4 workers) * d. Solving for d, we get d = (8 * 6) / 4 = 12 days.

Short Solution: (8 workers) * (6 days) = (4 workers) * d. Solving for d, we get d = (8 * 6) / 4 = 12 days.

**Q51: In a sentence, "The king's speech was eloquent," what word has a similar meaning?**

Long Answer: We can analyze the sentence and the context of the king's speech. "Eloquent" suggests the speech was well-articulated, persuasive, and impactful. Synonyms for eloquent include:
Articulate: Expressing oneself clearly and effectively
Persuasive: Able to convince or influence someone
Forceful: Powerful and impactful
Ornate: Highly decorated and elaborate (might be a bit too strong)
Considering the context of a king's speech, persuasive or articulate are the closest synonyms.

Short Answer: Persuasive (focuses on influencing) or Articulate (focuses on clarity).

**Q52: In the phrase "meticulous planning," what word best describes the opposite approach**

Long Answer: Here, "meticulous" signifies carefulness and attention to detail. We need an antonym that reflects the opposite, like carelessness or haste. Let's analyze some options:
Fastidious: Similar to meticulous, focusing on neatness.
Hasty: Done with undue speed or urgency (opposite of meticulous).
Careless: Lacking proper attention or concern (opposite of meticulous).
Hasty best captures the opposite of meticulous planning.

Short Answer: Hasty (focuses on speed over detail).

**Q53: If all dogs are mammals, and all mammals are warm-blooded, can we conclude all dogs are warm-blooded?**

Long Answer: We need to analyze the logical relationship between the statements. "All dogs are mammals" establishes a subset relationship - all dogs belong to the larger category of mammals. "All mammals are warm-blooded" implies every member of the mammal group is warm-blooded.
Therefore, since all dogs are included in mammals (warm-blooded), we can conclude all dogs are warm-blooded.

Short Answer: Yes, the statements establish a valid deduction chain.

**Q54: In a library, which category would a book on the history of flight most likely belong to**

Long Answer: Consider the book's subject. It deals with the history of flight, which could be categorized in different ways:
Science: Flight involves physics and technology.
History: It focuses on the development of flight over time.
Technology: The book might discuss the engineering aspects of flight.
Based on the overall theme, history seems the most fitting category.

Short Answer: History (focuses on the development timeline).

**Q55: Doctor is to patient as teacher is to...?**

Long Answer: We need to identify the relationship between doctor and patient. A doctor diagnoses and treats patients, establishing a care-giving connection.
Looking for a similar relationship for a teacher:
Parent: Carries a nurturing role, but not the specific profession.
Student: The recipient of the teacher's knowledge, similar to a patient.
Student best reflects the care-giving dynamic between doctor and patient.

Short Answer: Student (focuses on receiving knowledge).

**Q56: John arrives home soaked after a walk and announces, "It's pouring outside!" Can we infer it will definitely rain tomorrow?**

Long Answer: Here, we analyze the implication of John's statement. It's clear it's raining heavily now ("pouring"). However, the statement doesn't provide information about the weather's future state.
Rain today doesn't guarantee rain tomorrow. There could be a quick downpour that clears up.

Short Answer: No, John's statement only reflects the current weather.

**Q57: Sarah says, "I can't believe I failed the exam. I studied all night!" What assumption can we infer from her statement?**

Long Answer: We need to identify the underlying belief Sarah holds. Her disappointment suggests she assumed studying all night would lead to passing the exam.
It's possible other factors like exam difficulty or inadequate preparation contributed to her failure.

Short Answer: Sarah assumes studying guarantees success (might not be true).