

# Logical Reasoning



## Worksheet-1



**STOP**

A PROJECT BY PUNJAB GROUP

Worksheet-1

1. If sum of five prime numbers is even the smallest of the numbers is:  
A. 1 B. 2  
C. 7 D. 11
2. If we subtract 2 from tenth digit of a number the new number will become:  
A. Less than 2 from original number  
B. Less than 20 from original number  
C. More than 200 from original number  
D. More than 20 from original number
3. If  $a + b = 3ab$  then  $3 + 5 =$   
A. 3 B. 45  
C. 8 D. 30
4. If  $a = .01$  which one is in decreasing order:  
A.  $a, a^2, \sqrt{a}$  B.  $a^2, a, \sqrt{a}$   
C.  $\sqrt{a}, a, a^2$  D.  $\sqrt{a}, a^2, a$
5. If  $x = 2$  and  $y = 5$  then  $4x + 9y =$   
A. 48 B. 29  
C. 53 D. 40
6. 6 hours are what part of 2 days:  
A. 8<sup>th</sup> B. 24<sup>th</sup>  
C. 12<sup>th</sup> D. 6<sup>th</sup>
7. A can paint a wall in 3 hours with the help of B they can fill in 2 hours. In how much time B alone will paint the wall:  
A. 6 B. 3  
C. 2 D. 5
8. If your doctor gave you 5 doses of medicine and advised to take one every 4 hours how long would they last:  
A. Two days B. 16 hours  
C. 20 hours D. 12 hours
9. An insect begins climbing a wall 15 feet high every minute it ascends 2 feet but slides 6 inches. How much time will it reach the top:  
A. 15 B. 5  
C. 10 D. None



10. 210 oranges and 252 apples are equally packed in cartons so that no fruit is left. What is the biggest possible number of cartons needed:
- A. 10                                      B. 11  
C. 210                                      D. 150

STEP ENTRY TEST 2021



## Logical Reasoning

### ANSWER KEY (Worksheet-1)

1	B	6	A
2	B	7	A
3	B	8	B
4	C	9	C
5	C	10	B

### ANSWERS EXPLAINED

#### 1. Ans: (B)

Logically: All prime numbers are odd other than 2 and only possibility is

$$\text{odd} + \text{odd} + \text{odd} + \text{odd} + 2 = \text{even}$$

#### 2. Ans: (B)

e.g. 24950

subtract 2 from 5 we will get

24930, the number will decrease by 20

#### 3. Ans: (B)

$$3 + 5 = 3(3)(5) = 45$$

#### 4. Ans: (C)

$$a = \frac{1}{100} \quad a^2 = \frac{1}{10000}, \quad \sqrt{a} = \frac{1}{10}$$

#### 5. Ans: (C)

$$4x + 9y = 4(2) + 9(5) = 8 + 45 = 53$$

#### 6. Ans: (A)

$$\frac{6}{24 \times 2} = \frac{1}{8}$$

$$\frac{1}{8} \text{ or } 8^{\text{th}}$$

#### 7. Ans: (A)

$$\frac{1}{2} - \frac{1}{3} = \frac{3-1}{6} = \frac{1}{6}$$

Total time for B = 6 hours

#### 8. Ans: (B)

$$0 + 4 + 4 + 4 + 4 = 16 \text{ hours}$$

#### 9. Ans: (C)

$$2 - .5 = 1.5 \text{ feet in one minute}$$

$$= 15 \text{ feet} \Rightarrow \frac{1}{1.5} \times 15 = 10 \text{ minutes}$$

#### 10. Ans: (B)

2	210 - 252
3	105 - 126
7	35 - 42
	5 - 6

$$H.C.F. = 2 \times 3 \times 7 = 42 \text{ fruits in each box}$$

$$\text{No. of boxes} = \frac{210}{42} + \frac{252}{42} = 5 + 6 = 11$$

# STOP

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