

11-08-2024

(1)

Sunday

## General Ability

### NOA Past Papers

Q1 (a) Find out the correct word from the given jumbled spellings.

i- THRSI:

Jumbled letters: T, H, R, S, I  
Possible words: Think of common words that can be formed with these letters.

Correct word: SHIRT.

ii- GNDREA:

Jumbled letters: G, N, D, R, E, A  
Possible words: Look for a word related to these letters.

By rearranging these letters forms:

Correct word: GARDEN.

iii -

SCHAMOT:

Jumbled letters: S, C, H, A, M, O, T  
Try to think of words with these letters.

Correct word:

By rearranging these letters, we get CHAMOTS. However, if we focus on common English words, 'CHAMOT' (a type of clay) could be considered.

iv.

ONLND O:

Jumbled letters: O, N, L, N, D, O  
Possible words: Arrange these letters to form a recognizable place or thing.

Correct word:

By rearranging the letters given, 'LONDON'.

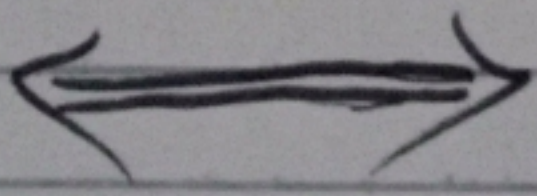
v.

HOBALY:

Jumbled letters: H, I, O, D, A, L, Y

Possible words: Try different combinations  
Correct word:

Rearranging these letters forms the word 'HOLIDAY'.



Q.1b: If radius of a cylinder is 10cm and height is 36cm - Find the volume of cylinder.

Solution:

To find the volume of a cylinder, use the formula.

$$V = \pi r^2 h$$

Given

$$\text{Radius } (r) = 10\text{cm}$$

$$\text{Height } (h) = 36\text{cm}$$

Now, applying and putting values in the formula.

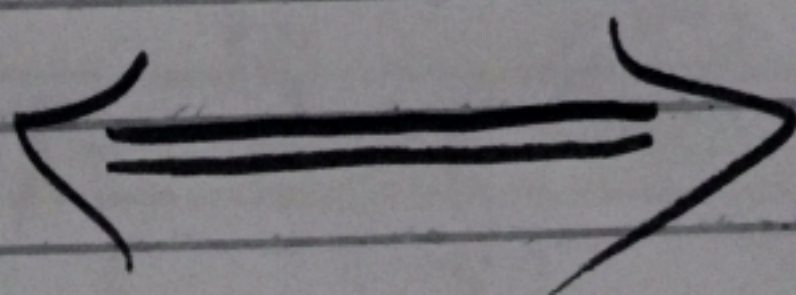
$$V = \pi (10)^2 (36)$$

$$\pi = 3.14$$

$$V = \pi (100) (36)$$

$$V = 3.14 (3600)$$

$$\boxed{V = 11304 \text{ Cubic Centimeters}}$$



(4)

Q: (c) A Cricket team won 60% of the total matches it played during the year. If it lost 24 matches in all and no matches were drawn, Find the number of matches played during the year.

Solution:

Let  $T$  be the total number of matches played during the year.

Set up the Equation:

The team won 60% of the matches, so it lost 40% of the matches.

According to the problem the number of matches lost

Therefore, 40% of the total matches  $T$  is equal to 24:

$$0.40 \times T = 24$$

To find  $T$ , divide both sides of the equation by 0.40

$$T = \frac{24}{0.40}$$

$$T = 60$$

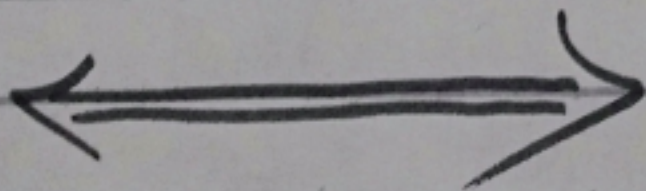
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## Verify the Solution:

If the team played 60 matches  
in total:  
Won  $60\%$  of 60 matches =  $0.60 \times 60$   
= 36 matches

Lost  $40\%$  of 60 matches:  $0.40 \times 60$   
= 24 matches.

The total number of matches played  
during the year is 60. ✓



Q: (d) A farmer cuts a 300ft fence into two pieces of different sizes. The longer piece should be four times as long as the shorter piece. How long are the two pieces?

Solution:

Let  $x$  be the length of the shorter piece. Since the longer piece is four times as long as the shorter piece, its length will be  $4x$ .

Set up the Equation:

The total length of the fence is 300 feet. Therefore, the sum of the lengths of the two pieces is 300 feet.

$$x + 4x = 300$$

$$5x = 300$$

Divide both sides by 5:

$$\frac{5x}{5} = \frac{300}{5}$$

$$x = 60$$

So the length of the shorter piece is 60 feet.

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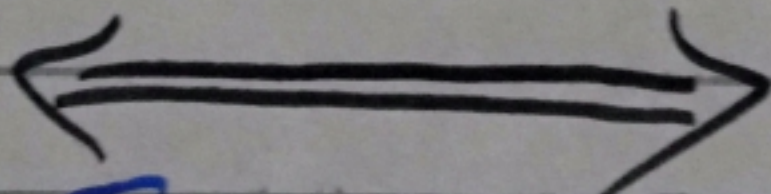
Find the length of the  
longer piece:

The length of the longer piece  
is four times the  
length of the shorter piece:

$$4x = 4(60) \\ = 240 \text{ feet}$$

Shorter piece: 60 feet

Longer piece: 240 feet.

  
THE END