



NATIONAL LEVEL SCIENCE TALENT SEARCH EXAMINATION

Solutions for Class : 5

MATHEMATICS

- 1. (C) $\frac{3}{4}$, $1\frac{4}{5}$, $2\frac{5}{6}$, ?, $4\frac{7}{8}$ = $\frac{3}{4}$, $\frac{9}{5}$, $\frac{17}{6}$, \Box , $\frac{39}{8}$ +10 +12
 - \therefore The missing fraction
 - $\frac{17 \ 10}{6 \ 1} \ \frac{27}{7} \ 3\frac{6}{7}$
- 2. **(D)** Perimeter of the given figure
 - 3.8 + 4.4 + 2.6 + 3.8 + 4.2 + 6.3 + 4.6 + 7.2 + 4.3 + 8.2 + 1.7 + 3.5 + 1.4 + 4.5 + 3.6 + 4.2 = 68.3 cm.
- 3. (C) Area of rectangle A : Area of rectangle B = (8×5) cm² : (15×4) cm² = 40 : 60 = 2 : 3
- 4. **(A)** Area of $X = \frac{1}{2} \times bh = \frac{1}{2} \times 4 \times 2 = 4cm^2$

Area of $Y = S^2 = 3 \times 3 = 9 \text{ cm}^2$ Area of rectangle = $I \times b = (9 \times 4) = 36 \text{ cm}^2$

- ∴ Area of shaded part = 36 (4 + 9) = 36 13 = 23 cm².
- 5. **(B)** Average time taken by the boys

$$\frac{63 \ 60 \ 66 \ 59 \ 68}{5}$$
$$\frac{316}{5} = 63.2 \text{ seconds}$$

GENERAL SCIENCE

- (A) The given figure shows the action of pulling out of nail by hammer. It is an example of I order lever.
- 7. (A) The waterdroplets formed on the leaves of plant on a cold morning is due to condensation of water vapour in air.
- 8. **(B)** X in the given figure is lungs. Lungs are the respiratory and excretory in function.
- 9. (C) The tortoise, moth and lizard reproduce by laying eggs. Only the lizard crawls. The moth is an insect, so it has six legs, not four.
- 10. (D) The stone occupies the space in the beaker of water. The amount of space it occupies is called volume.

CRITICAL THINKING

- 11. **(D)**
- 12. **(B)**
- 13. **(D)**
- 14. **(B)**
- 15. **(D)**

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