

SWO International Mathematics Olympiad 2021-22

Class 7th

Questions: 20

Time Duration: 30 Minutes

There are 4 Sections- 5 Questions in Section-1, 5 Questions in Section-2, 5 Questions in Section-3, 5 Questions in Section-4.

Section 1- (Integers, Fractions and Decimals)

1. (-11) divided by $(-3) =$

- a. 3
 - b. 3.6
 - c. -3
 - d. -3.6
- (b)

2. $20 * (-30) =$

- a. 600
 - b. -600
 - c. 500
 - d. -500
- (b)

3.

$$2\frac{3}{5} \times 2 =$$

a. $\frac{26}{5}$

b. $25/5$

c. $24/5$

d. $23/5$

(a)

4.

$$2 \div 1\frac{4}{5} =$$

a. $\frac{10}{9}$

- b. 9/9
 - c. 8/9
 - d. 7/9
- (a)

5. $4.88 * 3.9 =$

- a. 19.034
 - b. 19.033
 - c. 19.032
 - d. 19.031
- (c)

Section 2- (Decimals, algebra and angles)

6. 94.59 divided by 3.5 is equal to

- a. 27.025
 - b. 27.024
 - c. 27.023
 - d. 27.022
- (a)

7.

$$\frac{x^{-9}y^3}{x^{-7}y^8} =$$

a. $\frac{1}{x^2y^5}$

- b. $1/x^3y^6$
 - c. $1/x^4y^7$
 - d. $1/x^5y^8$
- (a)

8. Simplify the expression: $12p^2 - 9p + 5p - 4p^2 - 7p + 10$

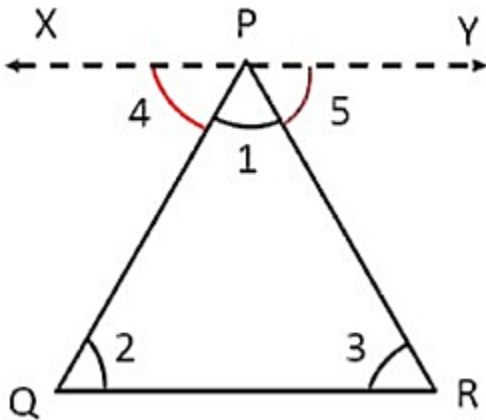
- a. $8p^2 - 11p + 10$
 - b. $8p - 11p + 10$
 - c. $8p + 11p - 10$
 - d. $8p - 11p - 10$
- (a)

9. Radha's Mother's age is 5 years more than three times Shikha's age. Find Shikha's age, if her mother is 44 years old.

- a. 13 years
- b. 12 years
- c. 11 years
- d. 10 years

(a)

10. If $XY \parallel QR$ with $\angle 4 = 50^\circ$ and $\angle 5 = 45^\circ$, then find all angle 3 of the ΔPQR .



- a. 42
- b. 43
- c. 44
- d. 45

(d)

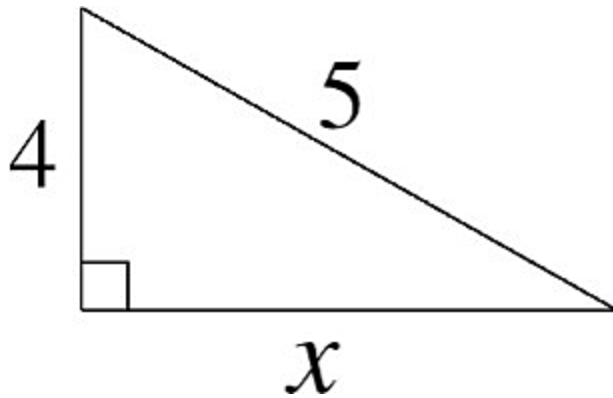
Section 3- (simple equations, triangles, rational numbers, perimeter and Area)

11. Sunita borrows a loan of Rs 5,0000 at 15% per year as the rate of interest. Find the interest she has to pay at end of one year.

- a. Rs. 57500
- b. Rs. 57501
- c. Rs. 57502
- d. Rs. 57503

(a)

12. Find the value of x in the given triangle if the hypotenuse is 5 cm and height is 4 cm.



- a. 6 cm
 - b. 5 cm
 - c. 4 cm
 - d. 3 cm
- (d)

13. Find the standard form of $12/18$.

- a. $3/3$
 - b. $4/3$
 - c. $2/3$
 - d. $1/3$
- (c)

14. Subtract $4/21$ from $8/21$.

- a. $5/21$
- b. $4/21$
- c. $8/21$

d. 7/21

(b)

15. Convert 70 cm² in mm²

a. 700 square mm

b. 600 square mm

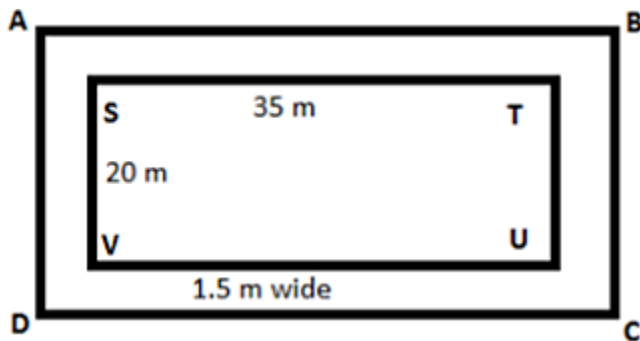
c. 500 square mm

d. 400 square mm

(a)

Section 4- (Data Handling, Probability, Perimeter and Area)

16. A rectangular park is 35 m long and 20 m wide. A path 1.5 m wide is constructed outside the park. Find the area of the path.



a. 200 square meter

b. 100 square meter

c. 300 square meter

d. 400 square meter

(c)

17. The score of 8 students in science is given. Find the average score of the students. 25, 28, 23, 24, 29, 35, 42, 48

a. 31.74

- b. 31.75
- c. 31.76
- d. 31.77 (b)

18. A coin is tossed. What is the probability of getting a tail?

- (a) 1
- (b) $\frac{1}{2}$
- (c) 2
- (d) 0 (b)

19. If we throw a dice then what is the probability that we will get a 5?

- a. $\frac{1}{6}$
- b. $\frac{2}{6}$
- c. $\frac{3}{6}$
- d. $\frac{4}{6}$ (a)

20. Find the area of a circle of radius 23 cm (use $\pi = 3.14$).

- a. 1661 square cm
- b. 1662 square cm
- c. 1663 square cm
- d. 1664 square cm (a)

