

## Mental Maths Worksheet for Class 12

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Mental Maths worksheet for class 12 is a set of mathematical problems and exercises designed to help students improve their mental calculation skills. These worksheets are typically used to practice basic arithmetic operations such as addition, subtraction, multiplication, and division, as well as more advanced mathematical concepts like algebra and geometry.

The main objective of a Mental Maths worksheet for class 12 is to help students build their mental arithmetic skills and confidence in solving mathematical problems quickly and accurately. Students must practice following Mental Maths questions for class 12.

## Mental Maths Worksheet for Class 12

## 1. What is the square root of 144 ?

Answer: 12

Explanation: The square root of 144 is 12 as 12 times 12 equals 144.
2. What is the cube root of 27 ?

Answer: 3

Explanation: The cube root of 27 is 3 as 3 times 3 times 3 equals 27 .
3. What is the square root of $\mathbf{2 5 6}$ ?

Answer: 16

Explanation: The square root of 256 is 16 as 16 times 16 equals 256.
4. What is the total cost of 4 pencils at $\$ 0.50$ each?

Answer: \$2

Explanation: $4 \times \$ 0.50=\$ 2$
5. If it takes 3 hours to complete a task, how long will it take to complete 5 tasks?

Answer: 15 hours

Explanation: $3 \times 5=15$
6. What is the circumference of a circle with a radius of 5 cm ?

Answer: 31.42 cm

Explanation: $2 \times$ pi x $5=31.42$ (where pi is approximately equal to 3.14 )
7. What is the area of a triangle with a base of 10 cm and a height of $\mathbf{8 c m}$ ?

Answer: $40 \mathrm{~cm}^{2}$

Explanation: $0.5 \times 10 \times 8=40$
8. What is the time in hours when 2:30 PM becomes 12:30 AM?

Answer: 10 hours

Explanation: 10 hours pass from 2:30 PM to 12:30 AM.
9. How many quarters are in $\mathbf{\$ 3 . 7 5}$ ?

Answer: 15 quarters

Explanation: $\$ 3.75 \div \$ 0.25=15$ quarters
10. If a rectangle has a length of 8 cm and a width of 6 cm , what is its area?

Answer: $48 \mathrm{~cm}^{2}$

Explanation: $8 \times 6=48$.
11. Convert 0.75 into a percentage.

Answer: 75\%

Explanation: To convert a decimal into a percentage, we multiply it by 100. 0.75 * $100=75$
12. Convert 0.5 into a percentage.

Answer: 50\%

Explanation: $0.5 * 100=50$

## 13. Evaluate $\mathbf{2 5 \%}$ of $\mathbf{3 0 0}$.

Answer: 75

Explanation: $25 \%$ of 300 means $300 \times 25 / 100=300 \times 0.25=75$
14. Convert a fraction into a percentage, $1 / 2$.

Answer: 50\%

Explanation: To convert a fraction into a percentage, we multiply the fraction by 100 . So, $1 / 2 \times 100=$ 50\%.
15. What is the perimeter of a rectangle with sides 5 cm and 6 cm ?

Answer: The perimeter is the sum of all sides of a rectangle. So, the perimeter $=5 \mathrm{~cm}+5 \mathrm{~cm}+6 \mathrm{~cm}$ $+6 \mathrm{~cm}=22 \mathrm{~cm}$

Explanation: To find the perimeter of a rectangle, we add all sides of the rectangle. In this case, the rectangle has sides of 5 cm and 6 cm , so we add both sides twice.

## 16. What is the area of a square with sides of 6 cm ?

Answer: The area of a square is the product of its sides. So, the area $=6 \mathrm{~cm} \times 6 \mathrm{~cm}=36 \mathrm{~cm}^{2}$.

Explanation: To find the area of a square, we multiply the length of one side by itself. In this case, the square has sides of 6 cm , so we multiply $6 \mathrm{~cm} \times 6 \mathrm{~cm}$.

Solve

1. What is the slope of a line that passes through points $(2,3)$ and $(5,7)$ ?
2. What is the equation of a line that passes through the point $(2,3)$ and has a slope of 2 ?
3. What is the length of the hypotenuse of a right triangle with legs of 3 cm and 4 cm ?
4. What is the equation of the midpoint of a line segment with endpoints $(3,4)$ and $(7,9)$ ?

## Answers

1. Answer: The slope of a line is the rise (change in $y$ ) over the run (change in $x$ ). So, slope $=(7-3) /$ $(5-2)=2$.
2. Answer: The equation of a line can be written in slope-intercept form, $y=m x+b$, where $m$ is the slope and $b$ are the $y$-intercept. To find the $y$-intercept, we plug in the point and the slope and solve for $b$. So, $y=2 x+b$ and $3=2(2)+b$, which gives us $b=-1$. Hence, the equation of the line is $y=2 x-1$.
3. Answer: The length of the hypotenuse can be found using the Pythagorean Theorem, which states that the sum of the squares of the legs is equal to the square of the hypotenuse. So, the length of the hypotenuse $=V(32+42)=5 \mathrm{~cm}$.
4. Answer: The midpoint of a line segment is the average of the $x$-coordinates and $y$-coordinates of the endpoints. So, the midpoint is $(3+7) / 2$.

## CREST Mathematics Workbook

As extra information, more related materials are also available for students to prepare concepts like addition for class 12 . Students are encouraged to think about learning from CREST Olympiads' workbooks. These workbooks have engaging content to make learning fun for class 12 students. It will help them to practice and prepare for CREST Mathematics Olympiad (CMO) and other exams. Additionally, useful for regular school tests.

CREST Mathematics workbook for class 12 can be considered by the students because of the following features -

1. Includes a detailed explanation of each topic with practice questionnaires.
2. Covers class 12 previous year paper of the CREST Mathematics Olympiad.
3. Provides answer key for all questions

## Useful Links:

CREST Mathematics Olympiad Book (First Chapter) PDF for Class 12 (Free Download)
CREST Olympiads Books for Class 12
Buy CREST Olympiads workbooks here: https://www.crestolympiads.com/olympiad-books


## About CREST Olympiads

CREST Olympiads, Most Innovative Olympiad exam is conducted for students in grades KG - $\mathbf{1 0}$. These Olympiad exams are taken by students from 25+ countries and 4000+ schools.

CREST Olympiads is organized in the following subjects:

1. CREST Mathematics Olympiad (CMO)
2. CREST Science Olympiad (CSO)
3. CREST English Olympiad (CEO)
4. CREST Reasoning Olympiad (CRO)
5. CREST Cyber Olympiad (CCO)
6. CREST International Spell Bee - Summer (CSB)
7. CREST International Spell Bee - Winter (CSBW)

## How to register for International CREST Olympiads?

Follow the below steps to register -

Step 1: Visit the Olympiad registration link.
Step 2: The registration form opens up.
Step 3: Fill in all the registration form details.
Step 4: Select the subject(s).
Step 5: Read the instructions carefully.
Step 6: Proceed to make the payment.
Step 7: Registration is complete.

Note: In case of any queries, related to CREST Olympiads, email us at info@crestolympiads.com or call/WhatsApp on +91-98182-94134.

