

Syllabus

Kindergarten to Lower Primary Level/Grades K-4

KINDERGARTEN 2/ GRADE K2

Numbers up to 20
Time
Length
Shapes
Pictorial graph

PRIMARY 1/ GRADE 1

Numbers up to 100
Addition & subtraction within 100
Multiplication within 40
Division within 20
Ordinal Numbers
Money
Time
Length
2D Shapes

PRIMARY 2/ GRADE 2

Numbers up to 1000
Addition & Subtraction within 1000
Multiplication and Division of 2,3,4,5 & 10
Length
Mass
Volume
Money
Fractions
Time
Picture Graphs
2-D & 3-D Shapes
Heuristics

PRIMARY 3-4/ GRADES 3-4

Numbers up to 100 000
Factors and Multiples
4 Operations of Whole Numbers within 100 000
Fractions
4 Operations of Decimals
Time
Area and Perimeter of Squares and Rectangles
Angles
Properties of Rectangles and Squares
Tables, Bar Graphs & Line Graphs
Money
Length, Mass and Volume
Heuristics

Upper Primary Level to Secondary Level/Grades 5-11

PRIMARY 5-6/ GRADES 5-6

Numbers up to 10 million
4 Operations of Whole Numbers within 10 million
4 Operations of Fractions
4 Operations of Decimals
Ratio
Percentage
Area and Perimeter of Composite Figures
Angles
Properties of Triangles & Quadrilaterals
Volume of Cube and Cuboid
Rate and Speed
Average
Algebra
Pie Charts
Nets Solid Figures
Heuristics

SECONDARY 1/2 / GRADES 7-8

4 Operations of Numbers
Ratio & Proportion
Percentage
Rate & Speed
Algebraic Expressions & Formulae
Functions & Graphs
Equations and Inequalities
Angles, Triangles and Polygons
Congruence and Similarity
Pythagoras' Theorem
Mensuration
Data Analysis
Maps and Scales

SECONDARY 3/4 / GRADES 9-10/11

Numbers and Number Patterns
Angles and Polygons
Mensuration, Arc Length and Area of Sector
Equations, Functions and Polynomials
Inequalities
Indices
Coordinate Geometry and Circles
Pythagoras' Theorem, Further Trigonometry and Applications of Trigonometry
Trigonometric Functions, Identities and Equations
Congruence and Similarity, Area and Volume of Similar Figures and Solids
Geometry and Properties of Circles
Set Language and Notation
Probability
Statistical Data Analysis
Vectors in Two Dimensions
Binomial Theorem
Matrices

SINGA SAMPLE QUESTIONS

DIVISION KINDERGARTEN (GRADE K)

Q1

10 apples are placed into 2 baskets.

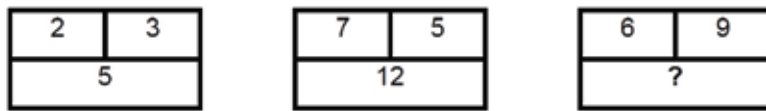


How many apples must be moved from basket B to basket A so that both baskets will have the same number of apples?

Answer: _____

Q2

Study the pattern below.
What is the missing number in the box?

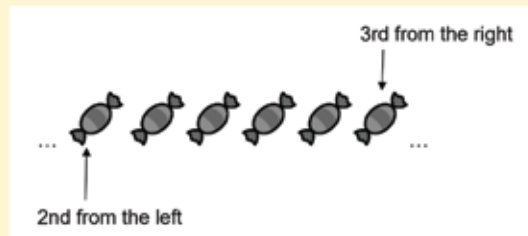


Answer: _____

DIVISION KINDERGARTEN (GRADE K)

Q1

A number of sweets are arranged in a row as shown below.

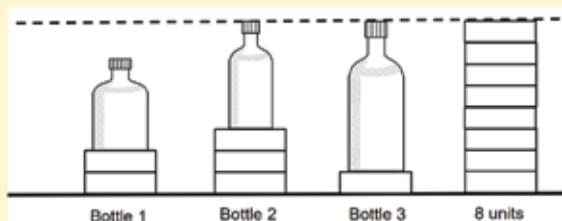



How many sweets are there altogether?

Answer: _____

Q2

Study the picture below.



Each  is 1 unit.

What is the total height of Bottle 2 and Bottle 3 in units?

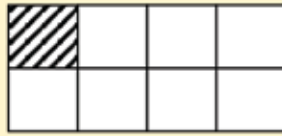
Answer: _____ units

SINGA SAMPLE QUESTIONS

DIVISION JUNIOR (GRADE 1 & 2)

Q1

In the figure below, one part of it is already shaded. How many more parts of the figure must be shaded so that $\frac{3}{8}$ of it is unshaded?



Answer: _____

DIVISION JUNIOR (GRADE 1 & 2)

Q2

Look at the number pattern. What is the missing number?



Answer: _____

DIVISION JUNIOR (GRADE 1 & 2)

Q1

Find the mass of one ball. (3 marks)



Answer: _____ kg

Q2

Ali bought some sweets. If he packs them equally into 4 jars, he will have 3 sweets left. If he packs them equally into 5 jars, he will have 1 sweet left. What is the least possible number sweets Ali bought? (4 marks)

Answer: _____ sweets

Q3

Anthony and Alvin had the same amount of money. Alvin spent all his money on a story book while Anthony bought a T-shirt for \$12 and had \$3 left. How much did the two boys have altogether at first? (5 marks)

Answer: \$ _____

DIVISION JUNIOR (GRADE 1 & 2)

Q1

Study the pattern below. How many circles will there be in pattern 5?



Pattern 1

Pattern 2

Pattern 3

Answer: _____ circles

SINGA SAMPLE QUESTIONS

DIVISION MIDDLE (GRADE 3 & 4)

Q1

$\star \times \star = 16$,
 $48 \div \star = \bullet$
Find the value of \bullet .

Answer: _____

DIVISION MIDDLE (GRADE 3 & 4)

Q2

The figure below is made up of 5 identical squares. The perimeter of the figure is 96cm. What is the area of each square?



Answer: _____ cm²

DIVISION MIDDLE (GRADE 3 & 4)

Q1

The arrow shows the direction Mr Sofian is facing. He turns 135° anti-clockwise and then 45° clockwise. In which direction is he facing now? (2 marks)



Answer: _____

Q2

There are some birds in three trees. 3 birds flew from the first tree to the second tree. 2 birds flew from the second tree to the third tree. After this, there were 5 birds in each tree. How many birds were there in each tree at first? (3 marks)

Answer: _____ birds

Q3

A tank, a pail and a bottle can hold a total 52 litres of water. The pail can hold 8 litres more water than the bottle. The tank can hold 4 times as much water as the pail. How much water can the bottle hold? (5 marks)

Answer: _____ litres

DIVISION MIDDLE (GRADE 3 & 4)

Q1

The cost of 1 storybook and 3 similar pens is \$7. The cost of 3 storybooks, 9 pens and 2 files is \$25.40. What is the cost of a file?

Answer: \$ _____

SINGA SAMPLE QUESTIONS

DIVISION INTERMEDIATE (GRADE 5 & 6)

Q1

The table below shows the marks obtained by five students for their Mathematics test. How many student(s) obtained more than the average mark of the group?

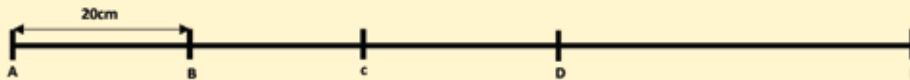
Name of students	Marks obtained
Ashykin	35
Benson	31
Charles	42
Devi	45
Eng Hul	27

Answer: _____

DIVISION INTERMEDIATE (GRADE 5 & 6)

Q2

In the figure below, AB is 20cm. B is the midpoint of AC, C is the midpoint of BD and D is the midpoint of BE. What is the length of AE?

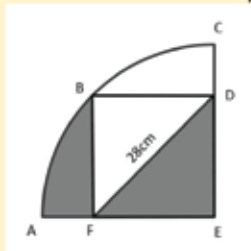


Answer: _____ cm

DIVISION INTERMEDIATE (GRADE 5 & 6)

Q1

The figure below is formed by a square BDEF and a quadrant. Given that $DF = 28$ cm, find the total area of the shaded parts. (Take $\pi = \frac{22}{7}$) (3 marks)



Answer: _____ cm²

Q2

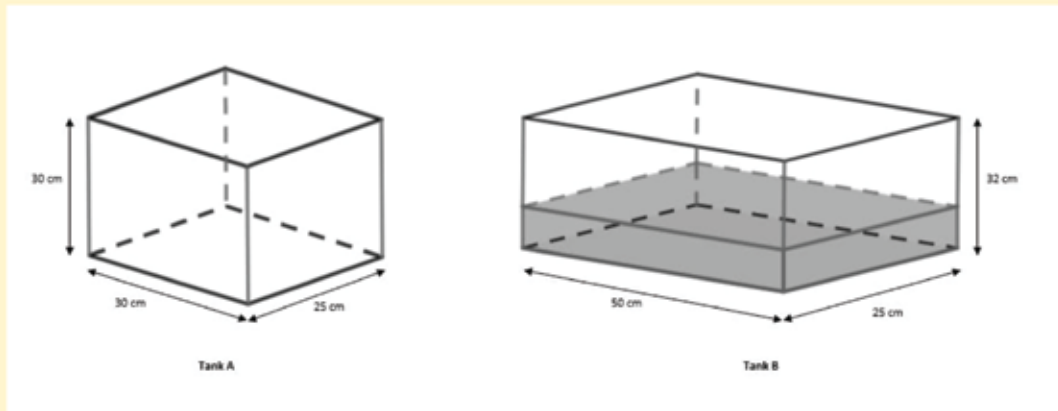
Tim had \$1060 more than Cory. After Tim gave $\frac{4}{9}$ of his money to Cory, they each had the same amount of money. How much money did Cory have at first? (4 marks)

Answer: \$ _____

SINGA SAMPLE QUESTIONS

Q3

Two rectangular tanks are shown below. At first tank A was empty and $\frac{1}{4}$ of Tank B was filled with water. Both taps were turned on at the same time and water from both taps flowed at the same rate of 1.5 litres per minute. How long did it take for the height of water to be the same in both tanks? (1 litres = 1000cm³) (5 marks)



Answer: _____

DIVISION INTERMEDIATE (GRADE 5 & 6)

Q1

Henry bought some chocolates and gave half of them to Wen Jie. Wen Jie bought some sweets and gave half of them to Henry. Henry ate 15 sweets and Wen Jie ate 18 chocolates. After that, the number of sweets and chocolates Henry had were in the ratio 1:7 and the number of sweets and chocolates Wen Jie had were in the ratio of 1:4. How many sweets did Wen Jie buy?

Answer: _____ sweets