









Divisibility

Rules

(Seven)



COMPENTIONS Page 4

V

Reading in a peaceful spot

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Pic. by Nilan Maligaspe





Please send competition entries to:



Funday Times C/O the Sunday Times P.O. Box 1136, Colombo. Or

8, Hunupitiya Cross Road, Colombo 2.

Please note that competition entries (except Reeves Art) are accepted by email.

Please write the name of the competition and the date clearly at the top of your entry and include the following details: Full Name (including Surname), Date of Birth, Address, Telephone No. and School.

> Please underline the name most commonly used.

All competition entries should be certified by a parent or guardian as your own work. Competition entries without the full details requested above, will be disqualified.

> **Closing date** for weekly competitions:

> > **December 23, 2020**

Telephone: 2479337/2479333 Email: fundaytimes1@gmail.com

Kistmas Cover 2020 Cover 2020

Hey Kids! It's time once again to think about the Funday Times Christmas Cover. We invite our readers to send in their paintings for the Christmas Cover Competition. Entries should be of a suitable Christmas theme. You could use any type of paints or crayons you like but try to make your picture

colourful and creative. All entries should be on A4 size paper.

Please write 'Christmas Cover' at the back of your picture and certify your entry. The best picture will adorn the cover page of our christmas issue

and the winner will also receive a prize.

This competition is open to children between 4 - 15 years of age.

Good luck and happy painting!



EUNDAY Or







Shafa Ghaney 12 years on Dec. 6



12 years on Dec. 4



hda

Shazin Rizwan 8 years on Dec. 3



Kimberley Wijesuriya 12 years on Dec. 1



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DECEMBER 6, 2020





Maths in Action 49 By R. N. A. de Silva

am sure that you are aware of the simple tests for divisibility by numbers 2, 3, 5 and 9. By extending these divisibility tests, we can also figure out divisibility by 4, 6 and 8. But what about 7?

This seems to be a difficult number to deal with but at the same time it is a very important number prevalent in nature. There are 7 oceans and 7 continents.

The rainbow has 7 colours and sound has 7 notes. There are 7 vertebrae in a human neck.

There are 7 days in a week. Many people also consider 7 to be a lucky number. The divisibility tests for 7 are not as simple as with other digits. The following procedure seems a reasonably simple way to find out whether a number is divisible by 7. Double the last



Let us try some examples. Consider 91.

Last digit is 1 and when doubled it becomes 2. Now subtract 2 from 9. Answer is 7 which is divisible by 7. Therefore 91 too is divisible by 7.

Now, let us consider a three-digit number: 315. When the last digit 5 is doubled, we obtain 10. Subtract 10 from 31. The answer is 21, which is divisible by 7. Therefore 315 is also divisible by 7.

This procedure can be carried out with any number, whatever the number of digits. If you consider 5394; $4 \ge 2 = 8$ and 539 - 8 = 531. Now $1 \ge 2 = 2$ and 53 - 2 = 51.

 $1 \ge 2 = 2$ and 5 - 2 = 3 which is not divisible by 7 which means that 5394 too is not divisible by 7.





Divisibility Rules of 7 (Seven)

> How this works can be shown algebraically. If a two-digit number has 'a' as the tens digit and 'b' as the unit, it can be written as 10a + b. If it is divisible by 7, we can write it as 10a + b = 7k. Therefore, b = 7k - 10a. If we double b and subtract from a, we obtain a - 2b. But a - 2b = a - 2(7k - 10a).

If we remove brackets the expression is a - 14k + 20a, which is equal to 21a - 14k. This is divisible by 7 as it can be written as 7(3a - 2k).

Similarly, try to show the working for a three-digit number using 100a + 10b + c = 7k.

Math Plot - 49

Try to find the solution to the following puzzle. You may send solutions with reasoning to *ndesilva@osc.lk* within the next three days. Please include your full name, date of birth, home address, contact details and the name of your school along with the solution.

If A, B and C are unequal digits, and given that B = 9, find the values of A and C which satisfy the following addition. ABC + ACB = BCA

Math Plot 48 – Solution

The answer is 16 triangles.

The winner is **Manthi De Silva** of Lyceum Int. School, Nugegoda. Congratulations!



SEVEN CONTINENTS





4 COMPETITIONS

No.178

Tomahawk

Questions for the Tomahawk Quiz No. 178 are based on articles appearing in the Funday Times of November 1, 8, 15 and 22, 2020. All you have to do is to find the answers to the questions given. Write the answers neatly on a postcard. Cut the strip 'Tomahawk Quiz No. 178' seen at the top of this page and paste it on your postcard. Please get your entries certified as your own work by a teacher or parent.

> Two lucky winners will receive brand new Tomahawk Mountain Bikes with the compliments of Tomahawk Bicycle Mall

All Funday Times readers between 8 – 15 years are eligible to participate.

(Those who have already won a bicycle are not eligible to participate.)

Closing Date: December 31, 2020

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TOMAHAWK

Bicycles

- 3. Puttalam is well-known for many reasons. Name three.
- 4. What nationality was the famous footballer Diego Maradona?
- 5. Who was elected to become the 46th President of the United States of America?

Securities Or *fundaytimes1@gmail.com*



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