

CUỘC THI CÂU LAC BÔ TOÁN TUỔI THƠ TOÀN QUỐC 2016
CHILDREN'S FUN MATHS JOURNAL NATIONAL COMPETITION 2016

ĐỀ THI CÁ NHÂN TIỂU HỌC
PRIMARY SCHOOL INDIVIDUAL PAPER

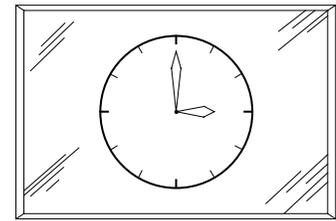
Thời gian: 30 phút (Duration: 30 minutes)

Problem 1. A piece of steel wire of length 70m56cm is cut into nails of length $3\frac{1}{2}$ cm. How many nails can be produced from the wire?

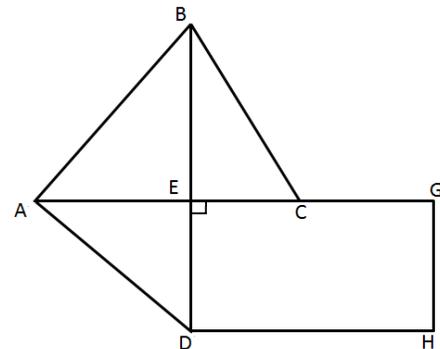
Problem 2. A piece of cloth contracts 2% of its length after washing and its length is now 22.54m. What was the length of the cloth before washing?

Problem 3. Given $A = \frac{1}{20} + \frac{1}{72}$; $B = \frac{1}{2} + \frac{1}{6} + \frac{1}{30}$; and $C = \frac{1}{42} + \frac{1}{56} + \frac{1}{12}$. Calculate the average of A , B , and C .

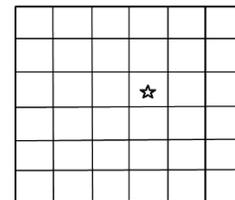
Problem 4. While looking into the mirror and combing his hair, An sees the image of the clock as in the figure. 5 minutes later, An looks at the real clock on the wall and realize that it's 15 minutes more until he needs to see a friend. What time (in hours and minutes) does An need to see his friend?



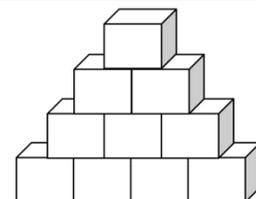
Problem 5. Given the following figure, where $EGHD$ is a rectangle. The triangles ABE , EBC and AED have areas of 35m^2 , 21m^2 , and 25m^2 respectively. Calculate the area of the rectangle $EGHD$, given that $\frac{CG}{AG} = \frac{3}{7}$.



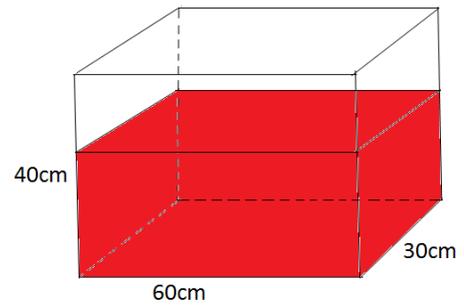
Problem 6. In the following figure, how many squares in total have the star inside it? (The figure comprises 36 small squares).



Problem 7. Cubes of side 5cm are arranged into the shape H (as in the figure). Find the total surface area of the shape H.



Problem 8. A cuboid container has dimensions as in the figure. The container has 54 liters of water in it. Bình wants to know a full bucket contains how many liters of water, so he pours the whole bucket of water into the container and finds that the level of the water is now $\frac{7}{8}$ the height of the container. From that, he is able to calculate how many liters of water a full bucket contains. If the container is empty, how many buckets of water must Bình pour into the container to make it full?



Problem 9. Find the two consecutive natural numbers x and y , given that $\frac{1}{18} < \frac{x}{12} < \frac{y}{9} < \frac{1}{4}$.

Problem 10. Evaluate the following

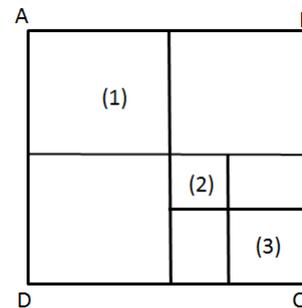
$$A = \frac{2015 + 2016 + 2017}{2014 + 2015 + 2016 + 2017 + 2018} \times 1000$$

Problem 11. Nam's class has 25 students. In the physical exercise in between lessons, all students stand in a straight line on the school's courtyard and the students are numbered from 1 to 25. The number of students standing before Nam is equal to $\frac{5}{7}$ the number of students standing behind Nam.

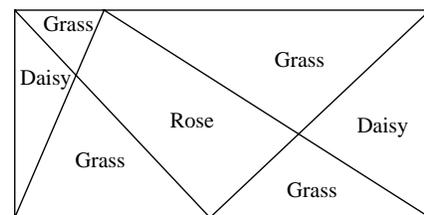
Determine Nam's position number in the line.

Problem 12. Sea water contains 2.5% salt. Each liter of sea water weighs 1.026 kg. How many liters of sea water needs to be evaporated to obtain 513kg of salt?

Problem 13. Given the square $ABCD$ as shown in the diagram. Given that the sum of the perimeters of the squares (1), (2), and (3) is 96 cm. Find the area of the square $ABCD$.



Problem 14. A rectangular flower garden is divided into separate areas to plant the different flowers (as shown in the diagram). Given that the total area to plant daisy is 15m^2 . Find the area of the land used to plant rose.



Problem 15. Given that $5 * 3 = \frac{1}{5} + \frac{1}{3} = \frac{8}{15}$, $2 * 9 = \frac{1}{2} + \frac{1}{9} = \frac{11}{18}$. Find x such that $x * 4 = \frac{5}{16}$.

Problem 16 (Written paper/Tự luận). Given the following figure. The two squares have sides of 10cm and 8cm, respectively. Find the area of the shaded region.

