

15-second questions

- The greatest even number less than 399 is divided by 10. What is the remainder? [8]
- How many grams are there in 0.05 kilogram? [50]
- By how much is 9 greater than $3\frac{5}{6}$? [$5\frac{1}{6}$]
- There are 6 000 pupils and 240 teachers in a school. What is the teacher-pupil ratio? [1:25]
- What are the common multiples of 2 and 3 between 40 and 50? [42 and 48]
- The degree measure of the angles of a triangle are consecutive multiples of 5.
What is the measure of the largest angle? [65°]
- A tank is $\frac{1}{6}$ full of gasoline. When 2 liters are added, the tank becomes $\frac{1}{4}$ full. What is the total capacity of the tank? [24 liters]
- If a semicircular sign has a perimeter of 60 cm, how long is its radius? Give the answer as an indicated quotients [$60/(2 + \pi)$] cm
- The sides of a cube are doubled in length to form a larger cube. How many original small cubes will this larger cube have? [8]
- A bag contains 20 balls: 5 are red, 5 are blue, 5 are green and 5 are yellow. What is the least number of balls a blindfolded person must get to be certain of getting at least one of each color? [16]
- Write forty-eight thousandths as a decimal. [0.048]

30-second questions

- The digits of the number 4123 are rearranged in descending order and then in ascending order. What is the difference between the resulting numbers? [3087]
- A rectangle is 24 cm long and 15 cm wide. Its length is decreased by 6 cm. How many centimeters must the width be increased to keep the same area? [5]
- A grocer buys oranges at 3 for 25 pesos and plans to sell them at 5 for 45 pesos. How many oranges must he sell in order to make a profit of 300 pesos? [450]
- In isosceles triangle PQR, the length of PQ is three times the length of PR. If the perimeter of the triangle is 35 cm, what is the length of PQ? [15 cm]
- I am a three-digit number. All my digits are different. My tens digit is less than 1. I am divisible by 5. My ones digit is greater than my hundreds digit. I am also divisible by 3. What numbers can I possible be? [405 or 105]
- At a children's party, Kim lost one-fourth of the number of his toys. He then gave away 8 of his remaining toys as gifts. One-half of the original number of his toys were left. How many toys had he to start with? [32]

1-minute questions

- A wire 60 cm in length is cut into two parts in the ratio 2:1. Each part is bent to form a square. What is the total area of the two squares? [125 sq cm]
- The school Math Team is made up of pupils from Grades 4, 5 and 6 only. Seven students are Grade 4, eleven students are Grade 5, and one-fourth of the entire team are Grade 6. How many students are on the team? [24]
- The length of a rectangle is increased by 15% and the width is decreased by 20%. What is the percentage change in the area of the rectangle? [8% less than the original]
- The Grade 5 pupils are going on a field trip. If each bus takes 45 pupils, there will be an excess of 10 pupils who would not be able to board the bus. If each bus takes 50 students, there will be an extra bus. How many buses is the school hiring? [12]
- A license number plate consists of exactly 4 digits. How many different plates may be constructed in which the sum of the digits is 35 or greater? [5]
- After 5 tests, a pupil's average was 80. After taking an examination which was counted as two test grades, his average dropped to 76. What was his grade on that examination? [66]

Climber

- A number multiplied by 5 and divided by 3 gives 40. What is the number? [24]
- Two squares with perimeter of 36 cm each are placed side by side. What is the perimeter of the resulting figure? [54 cm]
- Cup cakes are sold in packages of 10 and 15. If you need exactly 100 cup cakes for a children's party, what is the smallest number of both packages that you need to buy? [4 packages of 10 and 4 packages of 15]

Do or Die. The digits 1, 2, 3, 4, and 5 are each used once to compose a five digit number $abcde$, such that the three digit number abc is divisible by 4, bcd is divisible by 5, and cde is divisible by 3. What is the value of the digit a ? [1]