

4th Class

A school bus travels from Kildare to Dublin. There are four children in the bus. Each child has four boxes. There are four dogs sitting in each box. Every dog has four puppies with her. All these dogs have four legs, with four toes on each leg. No animal or human is missing any toes. What is the total number of toes in the bus?

1st Year

A fireman is standing on the middle rung of a ladder. When the smoke cleared a bit, he climbed up 7 rungs of the ladder. Later, when the smoke got worse, he climbed down 11 rungs. Finally, when the smoke cleared, he climbed up 17 rungs to the top rung. How many rungs were on the ladder?

4th Year

What is the units digit of 3^{2015} ?

5th Year

A circle is inscribed in a right-angled triangle. The triangle is isosceles with side lengths 1, 1 and x . By finding the value of x , determine the radius of the inscribed circle. Give your answer correct to four decimal places.