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|  | |  | | --- | | 1. In a bag of small balls 1/4 are green, 1/8 are blue, 1/12 are yellow and the remaining 26 white. How many balls are blue? 2. In a school 50% of the students are younger than 10, 1/20 are 10 years old and 1/10 are older than 10 but younger than 12, the remaining 70 students are 12 years or older. How many students are 10 years old? 3. If the length of the side of a square is doubled, what is the ratio of the areas of the original square to the area of the new square? 4. The division of a whole number N by 13 gives a quotient of 15 and a remainder of 2. Find N. 5. In the rectangle below, the line MN cuts the rectangle into two regions. Find x the length of segment NB so that the area of the quadrilateral MNBC is 40% of the total area of the rectangle.   problem 4.   1. A person jogged 10 times along the perimeter of a rectangular field at the rate of 12 kilometers per hour for 30 minutes. If field has a length that is twice its width, find the area of the field in square meters. 2. Four congruent isosceles right triangles are cut from the 4 corners of a square with a side of 20 units. The length of one leg of the triangles is equal to 4 units. What is the area of the remaining octagon?   problem 4.   1. A car is traveling 75 kilometers per hour. How many meters does the car travel in one minute? 2. Linda spent 3/4 of her savings on furniture and the rest on a TV. If the TV cost her $200, what were her original savings? 3. Stuart bought a sweater on sale for 30% off the original price and another 25% off the discounted price. If the original price of the sweater was $30, what was the final price of the sweater? 4. 15 cm is the height of water in a cylindrical container of radius r. What is the height of this quantity of water if it is poured into a cylindrical container of radius 2r? 5. John bought a shirt on sale for 25% off the original price and another 25 % off the discounted price. If the final price was $16, what was the price before the first discount? 6. How many inches are in 2000 millimeters? (round your answer to the nearest hundredth of of an inch). 7. The rectangular playground in Tim's school is three times as long as it is wide. The area of the playground is 75 square meters. What is the primeter of the playground? 8. John had a stock of 1200 books in his bookshop. He sold 75 on Monday, 50 on Tuesday, 64 on Wednesday, 78 on Thursday and 135 on Friday. What percentage of the books were not sold? 9. N is one of the numbers below. N is such that when multiplied by 0.75 gives 1. Which number is equal to N?  A) 1 1/2  B) 1 1/3  C) 5/3  D) 3/2 10. In 2008, the world population is about 6,760,000,000. Write the 2008 world population in scientific notation. 11. Calculate the circumference of a circular field whose radius is 5 centimeters. | |