

Bringing Maths to Life (Levels 1-2)

Read the questions below carefully and see if you can use your mathematical skills to solve the problems all the way to Level 3. If you're struggling to solve the problem, the tip might be able to help you.

Question	Tip	Answer
Officials would like to know the weight of the treasure. The truck and its contents weigh 5,500 pounds (~2500 kg). If the truck weighs 5,723 pounds (~2595 kg) after the treasure is loaded. How much does the treasure weigh?	Subtract the weight of the empty truck from the weight of the truck loaded with the treasure to find the weight of the treasure.	
The Narrator, the Researcher, the Translator, and The Treasure Hunter went out for a celebratory dinner. All four of them got the same thing, a lemonade and a delicious pasta dish. The lemonade cost \$1.75 and the delicious pasta cost \$17.25. How much did this meal cost?	Add the cost of one lemonade and one pasta dish and then multiply by four to find the total cost for all four people. Also can be done by finding the cost of 4 lemonades and 4 pasta dishes then adding those together.	
For the dinner above, if the state tax on meals is 7% of the total bill and the group decided to give a tip of 20% of the meal. How much did dinner cost in total for the group?	First, calculate the total meal cost above, then add 7% of this total for tax (this would be the total meal times 0.07), and finally add 20% of the meal cost for the tip.	
The delivery truck from the first question gets 16 miles per gallon. If they used 14 gallons of gas, how far did they travel?	Multiply the number of gallons used by the miles per gallon to find the total distance traveled.	
The delivery truck from the first question gets 16 kilometers per liter of petrol. If they went 256 kilometers, how many liters of petrol did they use?	Divide the total distance traveled by the fuel efficiency (kilometers per liter) to find the amount of petrol used.	
The Treasure held an old decorative key. It was brought to two people to estimate its value. The first person said it was worth \$4,571 and the second person said it was worth \$5,000. If you believe its value is exactly between the two estimates, how much is it worth?	Find the average of the two estimates by adding them together and dividing by two.	



Bringing Maths to Life (Levels 3-5)

Read the questions below carefully and see if you can use your mathematical skills to solve the problems all the way to Level 3.

If you're struggling to solve the problem, the tip might be able to help you.

Question	Tip	Answer
Someone asked the Researcher which book held the key to their discovery. The Researcher replied "It is one of those 20 on my desk". If you take a book at random, what are the chances you select the correct book?	Consider the probability of choosing one specific book out of 20 books as $\frac{1}{20}$. Divide 1 by 20 and then change the answer into a percent.	
The Treasure Hunter took multiple methods to get to the area where the treasure was. The flight from the start city to the destination was 1,423 meters. From there, the Treasure Hunter took a boat 7,800 meters, and finally took a jeep 40 decameters. How far did they travel in meters?	Add the distances of the flight, boat, and jeep journeys, ensuring all are converted to the same unit, meters. There are 1,000 meters in a kilometer. There are 10 meters in a decameter.	
The Researcher was researching the Treasure from February 27, 1986 until August 10, 1999. How many days did they research? You can assume all years have 365 days to avoid complications with leap years.	Months with 28 days: February Months with 30 days: April, June, September, November Months with 31 days: January, March, May, July, August, October, December	
If the pyramid where the Treasure was found had a rectangular base with length 15 meters and width 12 meters and a height of 9 meters. What is the volume of the pyramid?	Use the formula for the volume of a pyramid: $\text{Volume} = \frac{1}{3} \times \text{base area} \times \text{height}$, where the base area is the product of the length and width.	
If the Treasure Hunter swings 45 degrees while on their adventure, what was the measure of the swing in radians?	Convert degrees to radians using the formula: $\text{radians} = \text{degrees} \times (\pi / 180)$.	
The Treasure contained 3 coins with diamonds in them, 5 coins with rubies in them. If you are randomly selecting two of the coins. What is the probability that you select two diamond coins?	Multiply the probability of selecting one diamond coin from 8 total coins ($\frac{3}{8}$) by the probability of selecting another diamond coin from the remaining 7 coins ($\frac{2}{7}$).	