



- Marcus the sparky needed to re-wire a garage. He started with 15 metres of cable. The first stretch took 5.2 metres. Then the next loop up to a high power point needed 2.5 metres. Finally the terminal plug needed 3.7 metres. How much cable was left on the spool?

$15\text{m} - 5.2 - 2.5 - 3.7 = 3.6\text{m}$ or $15\text{m} - (5.2 + 2.5 + 3.7) = 3.6\text{m}$
- Micky was adding up her Hotwheels™ collection one Sunday afternoon. She had 13 green ones, 10 grey ones, 23 red ones and 17 blue ones and 4 orange ones. She decided to throw out the 11 cars with bent axles. How many did she have in her collection in the end?

$13 + 10 + 23 + 17 + 4 = 67$ $67 - 11 = 56$
- Gwilym decided to take himself and his brother Rory on the bus to the city swimming pool. It took three stages to get there (and three back). The first step cost \$3.20 each, the second \$2.10 and the third 1.80 The pools cost \$3.00 each to get in. How much money did he need to ask his mum for? What would you round it up to?

$(3.20 + 2.10 + 1.80) \times 2 = 14.20 + 3.00 = 17.20$ each. $17.20 \times 2 = \$34.40$ round up to **\$35.00**
- Savannah and Gabriella decided to have a massive Star Wars binge-watch. They saw 'The Phantom Menace' – 133 minutes. 'Attack of the Clones' – 142 minutes, and 'Revenge of the Sith' – 140 minutes. How many minutes of Star Wars did they see that night? Extra for experts: What is that in hours and minutes?

$133 + 142 + 140 = 415$ minutes. $415\text{minutes} = 6$ hours and **55 minutes** ($6 \times 60 = 360$, $415 - 360 = 55$)
- Ethan and Lucas thought it might be nice to try some science at home, but needed to get some equipment first. At the shop the vinegar was \$3.50, the baking soda was \$1.90. They found a small plastic container for \$1.50. There were some rubber gloves on special for 0.89 cents a pair. They saw some simple safety goggles for \$2.90 each. The big ticket items were the fuse wire at \$4.00 per metre (they needed at least 3 metres) and the 4 dynamite sticks were \$12.70 each. How much of their pocket money did they spend at 'Mad Uncle Dave's Explosion Emporium'? How much did they spend each, supposing they shared the cost equally?

$\$3.50 + \$1.90 + \$1.50 + (\$0.89 \times 2 = \$1.78) + (\$2.90 \times 2 = 5.80) + (\$4.00 \times 3 = 12) + (\$12.70 \times 4 = 50.80) =$
\$77.28 $\$77.28 \div 2 = \38.64 each
- Casey and Hayley ran in the 200 metre race on athletics day. Casey had eaten her Weetbix that morning and got a time of 34.45 seconds. Hayley had ice-cream for breakfast and wasn't feeling so good. She ran it in 36.72 seconds. How much faster was Casey's time? (Hint – there are 60 seconds in a minute, but fractions of a second are measured in 100ths)

$36.72 - 34.45 = 2.27$ seconds
- In the 5 days before your birthday, Grandma asks you how much money you have in your room. You come back and say you only have \$1.30 in change. She says that as a birthday treat she will come by and double the total money you have every day until your birthday. How much dosh do you end up with? (She started straight away by doubling your \$1.30)

This one has 2 possible answers:

 - $1.30 \times 2 = 2.60$, $2.60 \times 2 = 5.20$, $5.20 \times 2 = 10.40$, $10.40 \times 2 = 20.80$, $20.80 \times 2 =$ **\$41.60**
 - $2.60 + 5.20 + 10.40 + 20.80 + 41.60 =$ **\$80.60**
- One summer Nick and his family were planning a trip around the North Island in his mum's little car (because it's good on gas). If they drove carefully it only used \$10.00 of petrol to travel 100km. The trip was in several stages, and Nick's job was to add up the distances, then figure out how many dollars worth of petrol they'll need. The first leg was 132km. then the next was 210km. The next day they'd travel much further, 365km before staying overnight. The following day the journey was 256km including a short stop at Aunt Sophie's house. After having done most of a big circle, the last leg was 193km to get back home. What was the total length of the journey? How many dollars worth of petrol did Nick's mum need to buy? What did Aunt Sophie make Nick for afternoon tea?

Extra for experts: What was the average distance travelled each day?

$132 + 210 + 365 + 256 + 193 = 1156\text{km}$ $1156\text{km} \div 100\text{km per } \$10 =$ **\$115.60 for petrol**
Aunt Sophie must have made plain scones with jam and cream topping. Use inference people, c'mon.
 $(1156 \div 5) =$ **231.2km per day average** travelling distance.