MATHAROO

helping kids jump into maths

Student Name: _____

Grade:_____   Date:_____

1. Lego and Nintendo's Super Mario are to launch a new playset on August 1st this year. It will be selling at some stores for $90. If the store makes a 20% profit per set sold, how many sets will they need to sell to make a profit of $1,000?

2. The night of 21st June was the longest night of the year (it's called the Winter Solstice). Sunset on 21st June occurred at 5:52 pm, and sunrise on 22nd June at 6:33 am. What **FRACTION** of a 24-hour day is the "longest night"?

3. **QANTAS** and **Jetstar** have announced $19, one-way flights across Australia for flights between late June and 31st October. If Will's family has saved $1,000 for air travel, how many tickets would they be able to buy at that price? *(Hint: Estimation may help work this out quite easily!)*

4. 12-year-old Year 7 lad Leonardo Puglisi runs his own **YouTube** news channel – "**6News**". He's been "reporting" since he was 3 years old. If he's done one report each week since turning 3, how many reports will he have done by the time he turns 13?
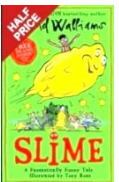
5. About 6.3 million people have now downloaded the Government's COVIDSafe app. What fraction of Australia's adult population of 18 million is that? Express your answer in simplest terms.

6. Jacob has bought more than three notebooks. All of them are black except for three. All of them are blue, except for three. All of them are yellow, except for three. All of them are maroon, except for three. How many notebooks did he buy?

7. The longest children's best-selling book title last week was "**THE BALLAD OF SONGBIRDS AND SNAKES**". The shortest title was "**SLIME**". In terms of the number of letters in those titles, what **FRACTION** of the number of letters in the shorter title is the number of letters in the longer title?

8. A bag contains 5 white marbles and 15 green marbles. What is the probability that a marble drawn from that bag will be a white marble?

9. **Open-Ended Question:** The answer is 7/11. What **MAY** be the question?