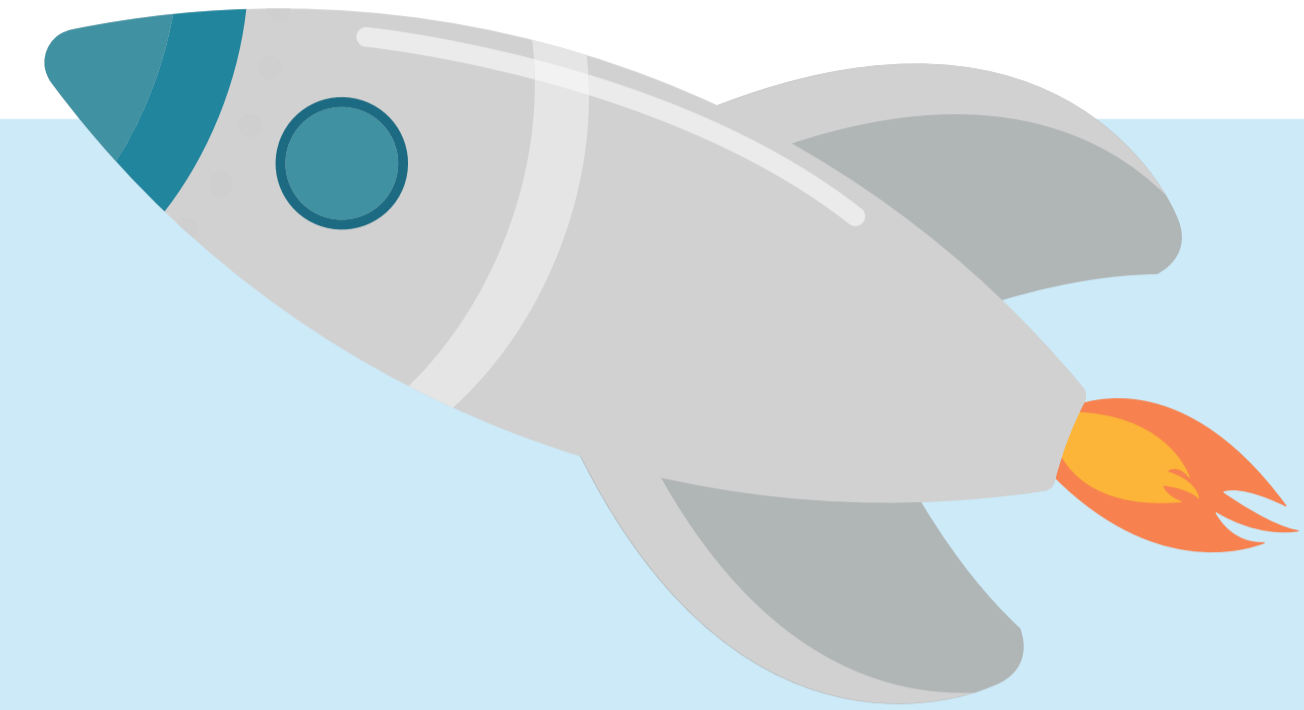


CALCULATIONS



1 Challenge one

Time yourself answering these mental calculations.
Can you get faster each time? Can you beat someone in your house?

Set one

$12 \times 12 =$

$44 \div 11 =$

$160 \div 4 =$

$122 - 23 =$

$22 \times 7 =$

$56 \times 3 =$

$25 \times 5 =$

Time

$19 + 5 =$

$11 \times 22 =$

$67 \times 3 =$

Set two

$9 \times 12 =$

$88 \div 11 =$

$200 \div 4 =$

$222 - 24 =$

$27 \times 4 =$

$99 \times 3 =$

$20 \times 5 =$

Time

$29 + 6 =$

$25 \times 12 =$

$56 \times 3 =$

Set three

$99 \times 2 =$

$121 \div 11 =$

$160 \div 4 =$

$122 \times 23 =$

$7 \times 22 =$

$66 \times 3 =$

$25 \times 5 =$

Time

$39 + 5 =$

$13 \times 22 =$

$67 \times 3 =$

2 Challenge two

Estimate the answer to these questions then calculate the exact answer.



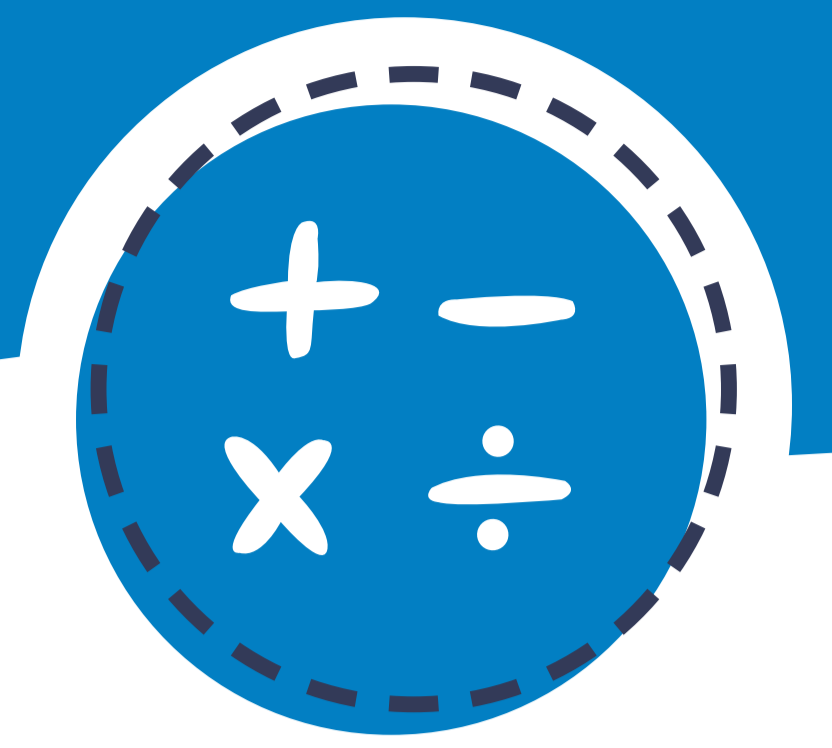
Question

Estimation

Exact answer

$3,645 \times 3 =$

$4,368 \div 3 =$



Question

Estimation

Exact answer

1,999 x 4 =

499 x 478 =

20,268 ÷ 4 =

20 x 3456 =

19 x 5002 =

1,999 + 2,001 + 1,899 =

99,999 + 89,999 =

19,998 ÷ 4 =

3

Challenge three

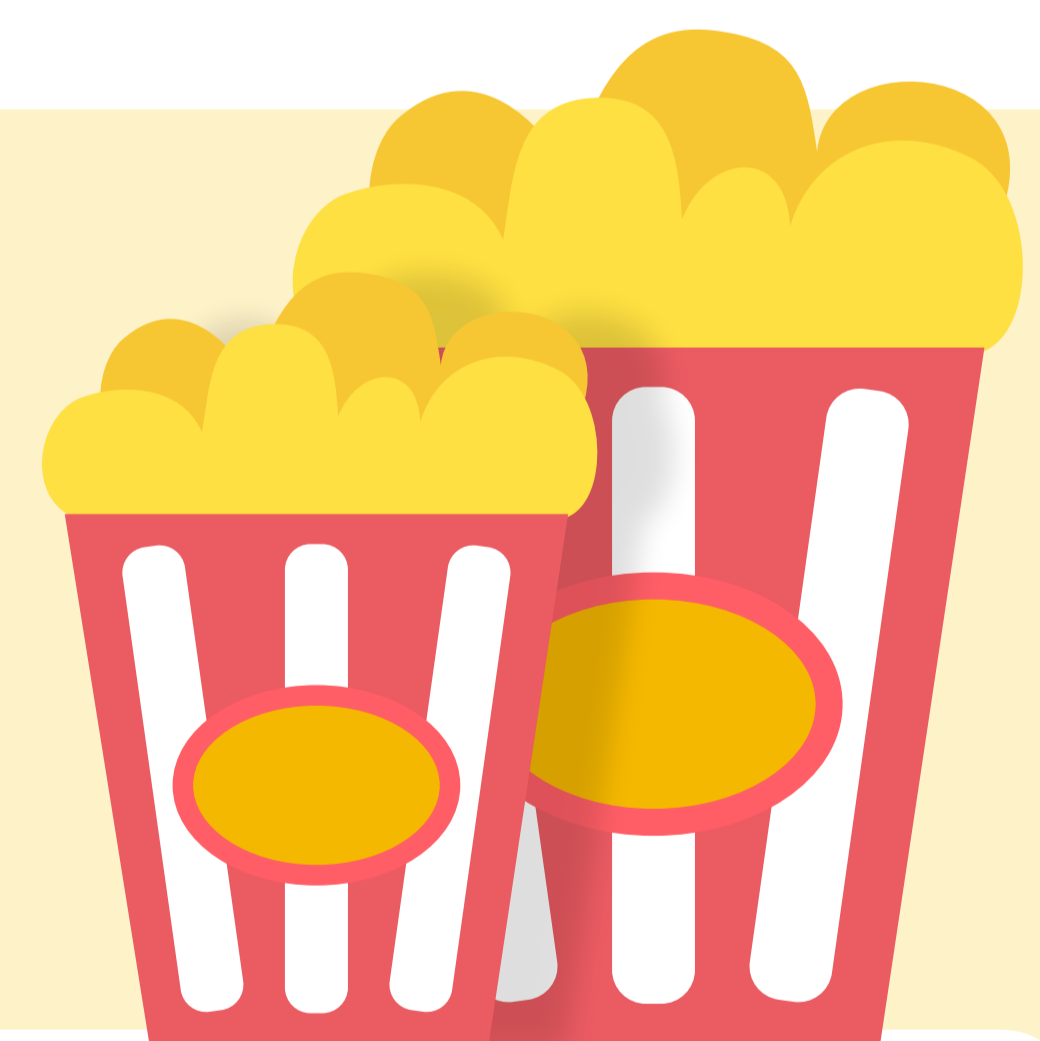
Solve the word problems.

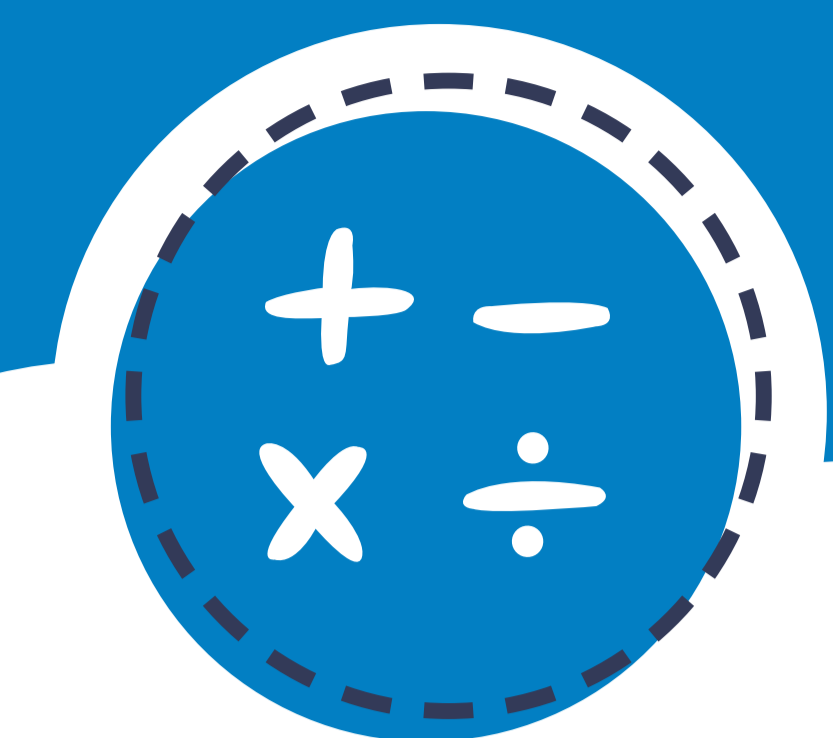
1. Lewis cycled 56 miles everyday for 3 years. How many miles did he cover?

2. A theatre sold out its 280 seats. Half the seats were bought for adults, one quarter for children and one quarter for concessions. How much money did they make?

Ticket prices:

Adults	£22
Children	£14
Concessions	£18

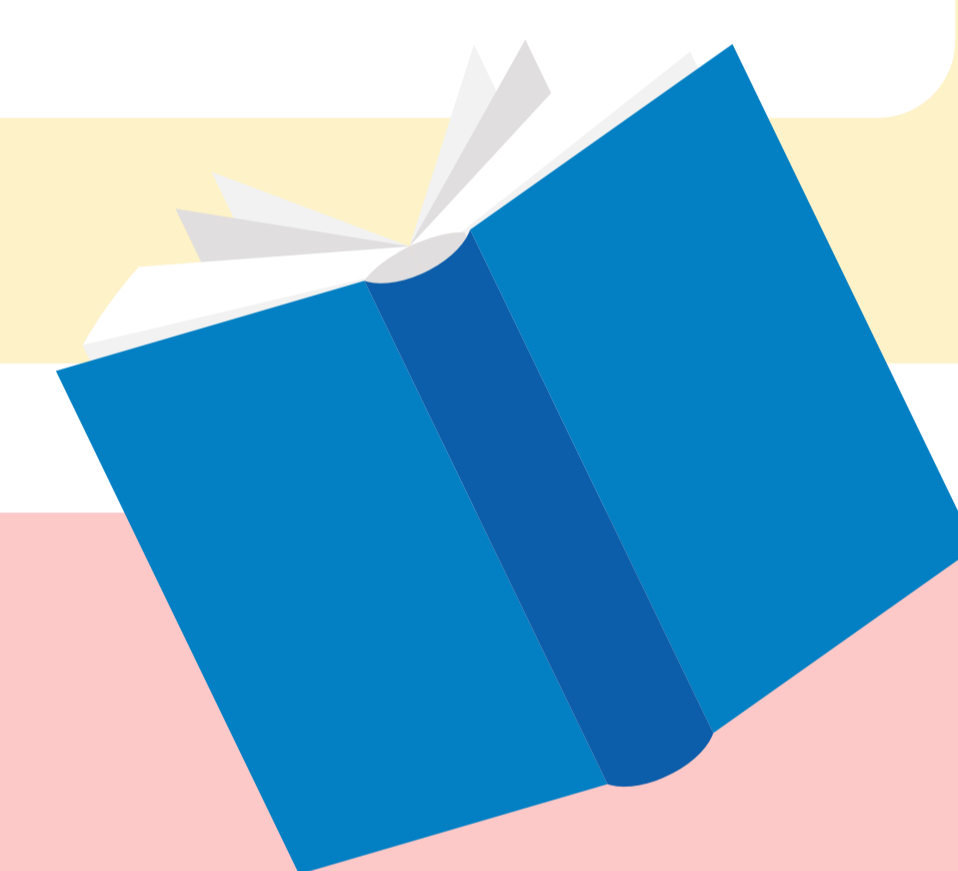




3. The population of Cardiff is 478,000. If the average ice-cream consumption is 23 per year, how many are consumed in total?

4. 19,456 e-readers had an average of 345 books downloaded. How many books have been downloaded in total?

5. Wimbledon's Centre Court has a capacity of 14,979. If the average price for a ticket is £140, how much would they take from ticket sales?



- 4 Write the value of the following.

6^3

9^5

3^3

$3^3 \times 3^9$

$6^3 \times 6^5$

$a^9 \times a^5$

674×10^3

345×10^5

24×10^2

123×10^6