

Division ThHTO ÷ O rounding remainders



Use the formal written method of short division to calculate ThHTO ÷ O (rounding remainders)
Estimate and check the answer to a calculation

Example

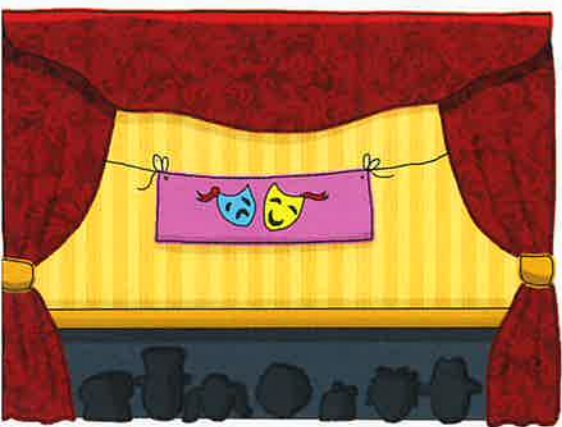
$$368 \div 6 \rightarrow 360 \div 6 = 60$$

| | | | |
|---|---|---|------|
| H | T | O | |
| | | 6 | 1 r2 |
| 6 | 3 | 6 | 8 |

Write the answers to these division calculations. Remember to record any remainders.

- a $276 \div 9$
- b $458 \div 5$
- c $647 \div 8$
- d $548 \div 6$
- e $816 \div 8$
- f $549 \div 9$
- g $6370 \div 7$
- h $7263 \div 9$
- i $3641 \div 4$

Find the answer to each of the word problems about the theatre. If there is a remainder think carefully about whether it needs to be rounded up or down to fit the question.



- a 1855 people attend the pantomime during the week, Monday to Friday. On average, how many people is this per day?
- b In one day £1362 was taken on pantomime programmes. If each programme costs £6, how many programmes were sold?
- c The theatre has taken £3240 from ticket sales in one day. If each ticket costs £9, how many tickets were sold?
- d Sandwiches are sold in packs of 4. During the interval 2153 sandwiches were eaten. How many packs were sold?
- e 1612 people bought a programme over the weekend. Programmes come in packs of 6. How many packs were needed?

- f At the end of the week there are 1456 bottles of drink remaining in the café. Drinks are placed into crates holding 9 bottles each. How many crates are required?
- g 1325 people are attending a performance of the pantomime. Seating is in rows of 8. How many rows of seats are required?
- h The school raises £3742 for children to attend the pantomime. If each ticket costs £7, how many children can attend?
- i Biscuits are sold in packs of 6. If 4563 packs were sold, how many biscuits were sold altogether?
- j 3462 adult's tickets and 2758 children's tickets were sold in a week. If an adult ticket costs £9 and a child's ticket cost £7, how much money did the theatre take in ticket sales in one week?
- k Ice cream tubs are sold in trays of 8. If 4532 ice cream tubs were sold in a week, how many trays were needed?

Challenge 3

- 1 Write your own word problems that involve rounding up or down for each set of calculations. The arrow \uparrow means round the answer up. The arrow \downarrow means round the answer down. Swap them with a partner to solve.
 - a $1263 \div 4 \uparrow$
 - b $2468 \div 5 \downarrow$
 - c $669 \div 8 \downarrow$
 - d $1321 \div 6 \uparrow$
- 2 Can you find five examples of situations in school where the answer to a problem might involve having to round the answer up or down?
- 3 Can you find five examples of situations at home or when you are out and about where the answer to a problem might involve having to round the answer up or down?

