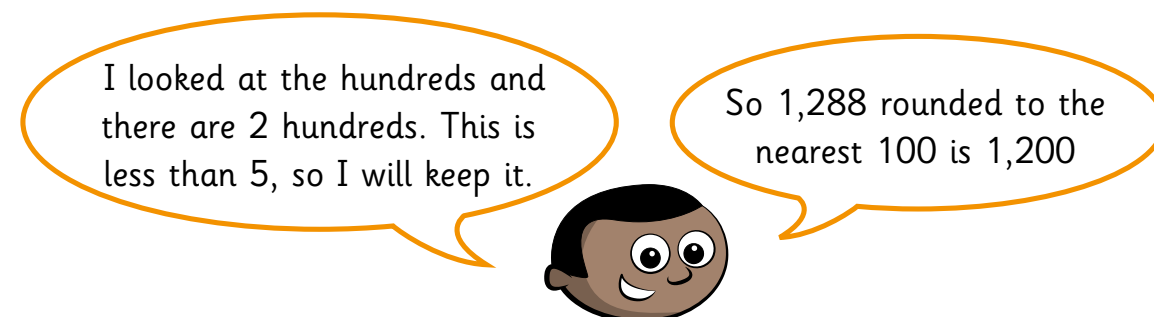


Round integers to the nearest power of ten

1 Complete the sentences.

- a) 57 rounded to the nearest 10 is 60
- 257 rounded to the nearest 10 is 260
- 657 rounded to the nearest 10 is 660
- 1,157 rounded to the nearest 10 is 1,160
- 230,457 rounded to the nearest 10 is 230,460
- b) 1,183 rounded to the nearest 10 is 1,180
- 1,184 rounded to the nearest 10 is 1,180
- 1,185 rounded to the nearest 10 is 1,190
- 1,186 rounded to the nearest 10 is 1,190

2 Mo is rounding 1,288 to the nearest 100



What mistake has Mo made? What should he have done?

He should have looked at the tens column.

1,288 rounded to the nearest 100 is 1,300

3 Round these numbers to the nearest 100

- | | | | |
|----------|--------------------|-----------|---------------------|
| a) 729 | 700 | d) 11,872 | 11,900 |
| b) 1,705 | 1,700 | e) 9,975 | 10,000 |
| c) 7,650 | 7,700 | f) 45 | 0 |

4 The number of people at a concert rounded to the nearest 100 is 15,600

a) How many people could have been at the concert?

Circle all the possible numbers.

15,580 15,492 15,658 15,642

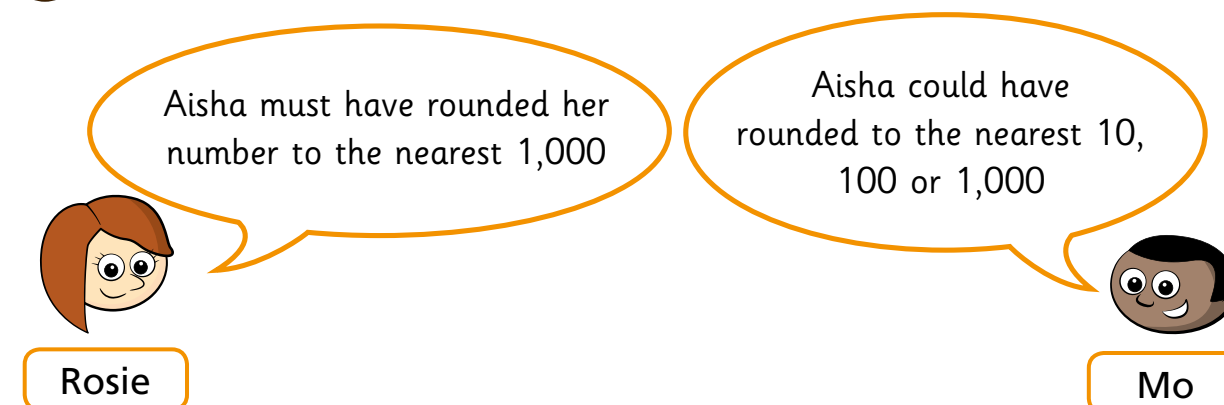
b) What is the greatest number of people that could have been at the concert?

15,649

Explain your answer.

15,649 is the greatest integer that rounds to
15,600 to the nearest 100. 15,650 would round to 15,700

5 Aisha rounds an integer. Her answer is 7,000



Who is correct? Mo

Give reasons for your answer.

7,001 rounds to 7,000 to the nearest 10, 100
and 1,000

- 6 a) Complete the table.

Number	Rounded to the nearest 10,000	Rounded to the nearest 1,000	Rounded to the nearest 100
36,892	40,000	37,000	36,900
81,055	80,000	81,000	81,100
7,908	10,000	8,000	7,900
126,388	130,000	126,000	126,400

- b) Here is some information about another number.

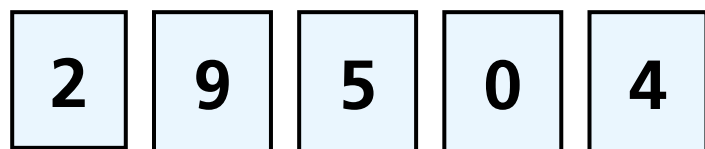
Number	Rounded to the nearest 10,000	Rounded to the nearest 1,000	Rounded to the nearest 100
	20,000	17,000	17,300

What could the number be?

Give five possible examples.

Any five numbers between 17,250 and 17,349 inclusive.

- 7 Here are some digit cards.



Use all the digits to make a number that will round to:

- 43,000 to the nearest 1,000

42,950

- 95,200 to the nearest 10

95,204

- 50,000 to the nearest 10,000

49,520

Compare answers with a partner.

- 8 Here is an article from a newspaper.



- a) Do you think there are exactly 30,000 rhinos left in the wild?

Give reasons for your answer.

- b) What is the greatest possible number of rhinos?

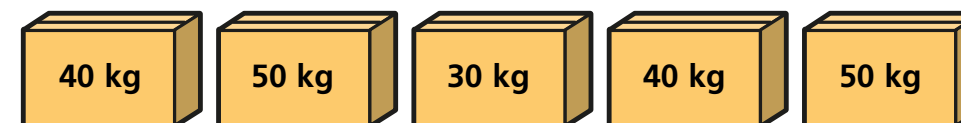
34,999

- c) What is the least possible number of rhinos?

25,000

- d) Compare your answers to part b) and c) with a partner.

- 9 These are the weights of 5 boxes rounded to the nearest 10 kg.



The boxes need to be put on a pulley lift to transport them to the top floor of a building.

The maximum load of the lift is 225 kg.

Is it safe to transport all 5 boxes at once? No

Explain your reasoning.

40 + 50 + 30 + 40 + 50 = 210kg Each box could weigh up to 5kg more than it is labelled. 5 x 5kg = 25kg 210kg + 25kg > 225kg