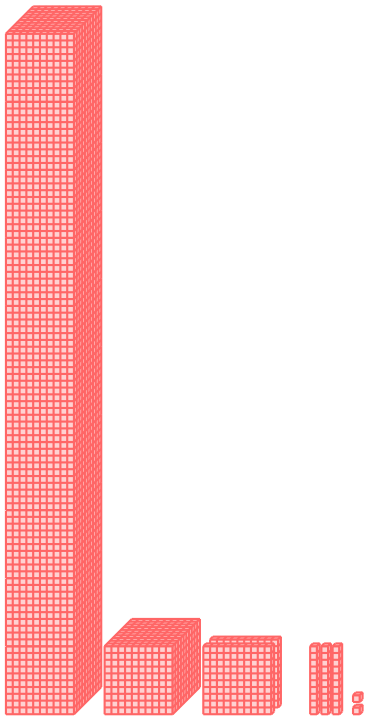
WHOLE NUMBERS

A DEFINITIONS

A.1 COUNTING CUBES IN A TABLE

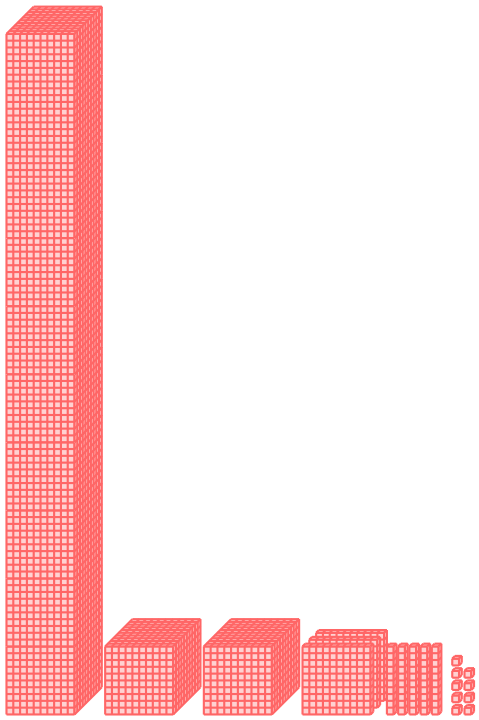
Ex 1:



The number of cubes is

Ten thousands	Thousands	Hundreds	Tens	Ones

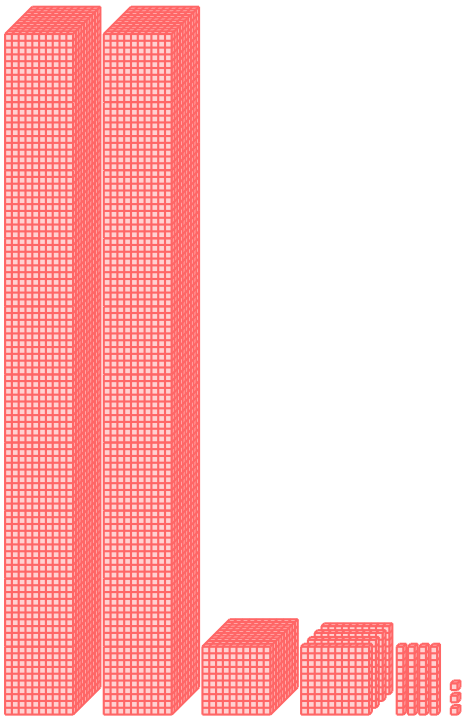
Ex 2:



The number of cubes is

Ten thousands	Thousands	Hundreds	Tens	Ones

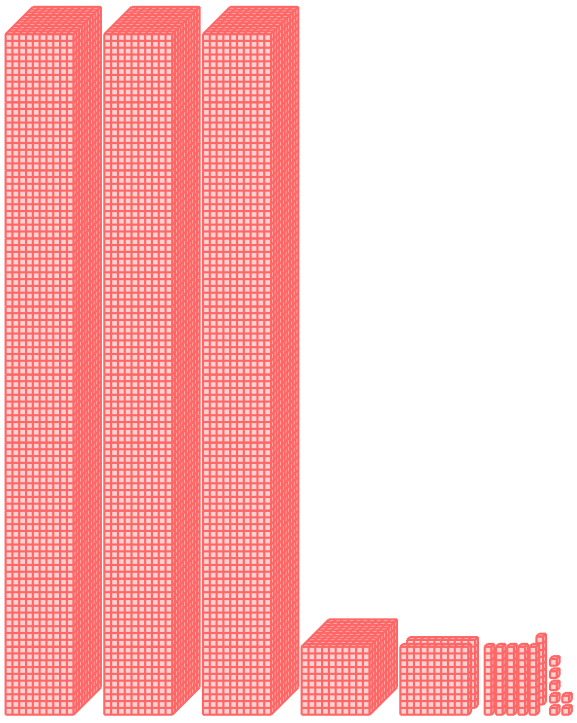
Ex 3:



The number of cubes is

Ten thousands	Thousands	Hundreds	Tens	Ones

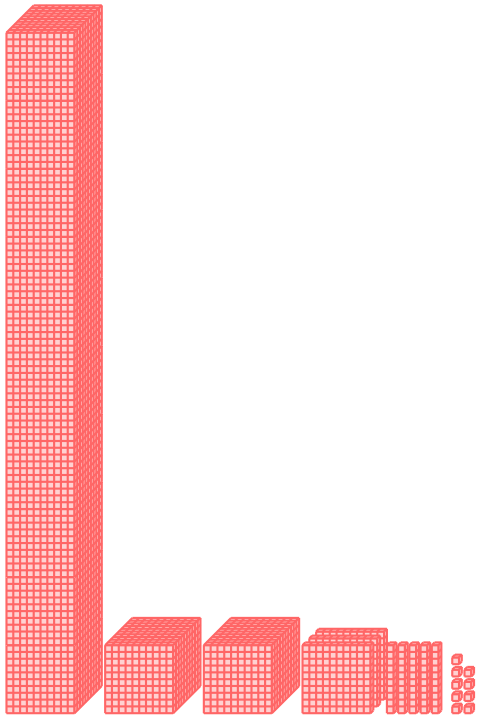
Ex 4:



The number of cubes is

Ten thousands	Thousands	Hundreds	Tens	Ones

Ex 5:

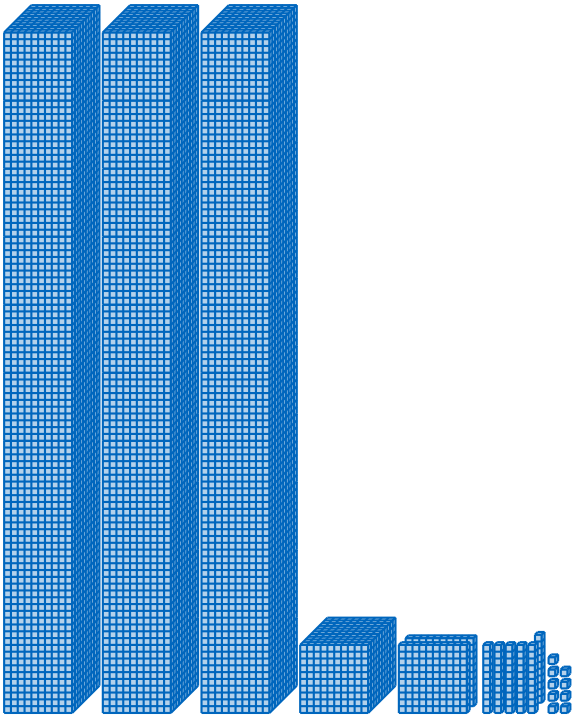


The number of cubes is

Ten thousands	Thousands	Hundreds	Tens	Ones

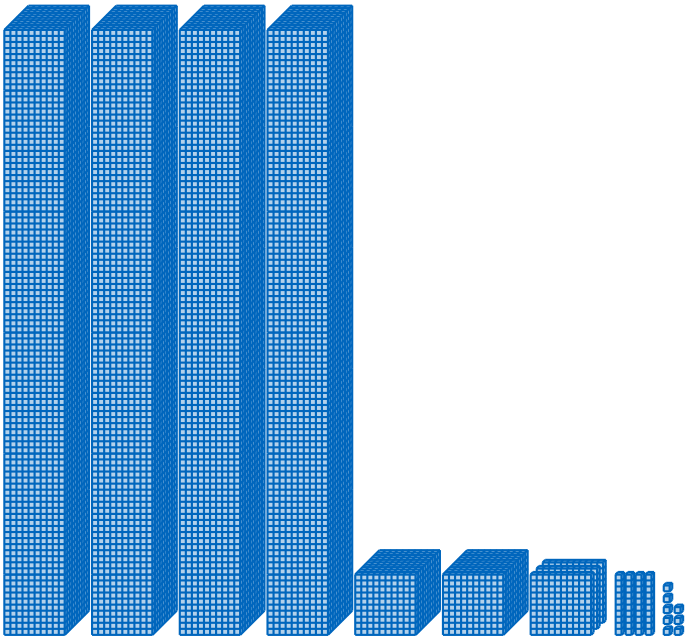
A.2 COUNTING CUBES

Ex 6:



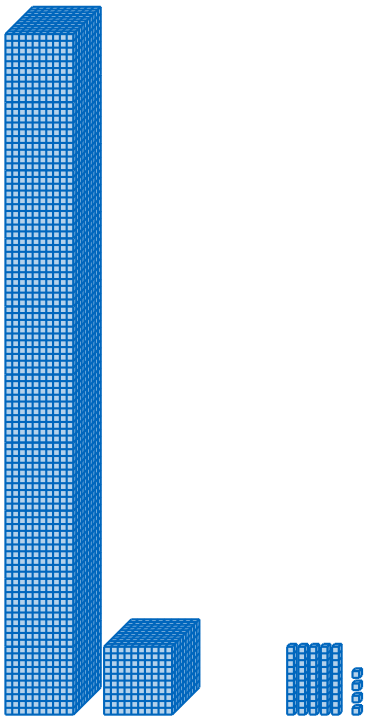
The number of cubes is .

Ex 7:



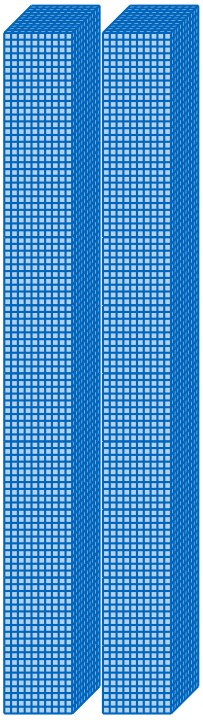
The number of cubes is .

Ex 8:



The number of cubes is .

Ex 9:



The number of cubes is ☐.

A.3 COUNTING CUBES FROM A TABLE

Ex 10:

Ten thousands	Thousands	Hundreds	Tens	Ones
3	1	7	6	9

The number is ☐.

Ex 11:

Ten thousands	Thousands	Hundreds	Tens	Ones
1	1	5	8	9

The number is ☐.

Ex 12:

Ten thousands	Thousands	Hundreds	Tens	Ones
2	1	3	0	0

The number is ☐.

A.4 FINDING THE DIGIT

Ex 13: The digit in the hundreds place of 24 325 is ☐.

Ex 14: The digit in the ten thousands place of 41 092 is ☐.

Ex 15: The digit in the ones place of 4 109 is ☐.

Ex 16: The digit in the tens place of 31 267 is ☐.

Ex 17: The digit in the thousands place of 21 443 is ☐.

A.5 WRITING NUMBERS FROM TEN THOUSANDS, THOUSANDS, HUNDREDS, TENS, AND ONES

Ex 18: 3 ten thousands + 2 thousands + 3 hundreds + 2 tens + 8 ones = ☐

Ex 19: 4 ten thousands + 5 thousands + 1 hundreds + 9 tens + 6 ones = ☐

Ex 20: 6 ten thousands + 1 thousands + 5 hundreds + 2 tens + 9 ones = ☐

Ex 21: 2 ten thousands + 7 hundreds + 4 tens + 3 ones = ☐

A.6 WRITING NUMBERS FROM EXPANDED FORM

Ex 22: $30\,000 + 2\,000 + 300 + 20 + 8 =$ ☐

Ex 23: $40\,000 + 5\,000 + 100 + 90 + 6 =$ ☐

Ex 24: $20\,000 + 700 + 40 + 3 =$ ☐

Ex 25: $60\,000 + 1\,000 + 500 + 20 + 9 =$ ☐

A.7 WRITING NUMBERS FROM EXPANDED FORM

Ex 26: $6 \times 10\,000 + 2 \times 1\,000 + 5 \times 100 + 2 \times 10 + 9 \times 1 =$ ☐

Ex 27: $4 \times 10\,000 + 3 \times 1\,000 + 7 \times 100 + 1 \times 10 + 6 \times 1 =$ ☐

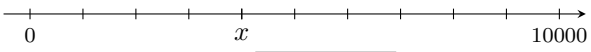
Ex 28: $1 \times 10\,000 + 2 \times 1\,000 + 8 \times 100 + 5 \times 10 + 0 \times 1 =$ ☐

Ex 29: $5 \times 10\,000 + 9 \times 1\,000 + 0 \times 100 + 3 \times 10 + 7 \times 1 =$ ☐

B ON THE NUMBER LINE

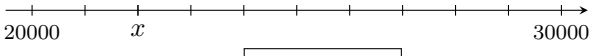
B.1 FINDING NUMBERS

Ex 30:



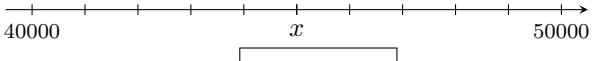
$x =$ ☐

Ex 31:



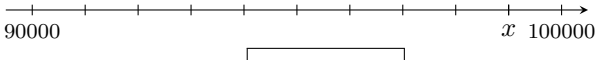
$x =$ ☐

Ex 32:



$x =$ ☐

Ex 33:



$x =$ ☐

C BIG NUMBERS

C.1 COUNTING FROM A TABLE

Ex 34:

billions			millions			thousands			units		
H	T	U	H	T	U	H	T	U	H	T	U
0	0	0	0	0	1	2	5	0	0	0	0

The number is ☐.

Ex 35:

billions			millions			thousands			units		
H	T	U	H	T	U	H	T	U	H	T	U
0	0	0	0	1	2	0	0	0	0	0	0

The number is ☐.

Ex 36:

billions			millions			thousands			units		
H	T	U	H	T	U	H	T	U	H	T	U
0	0	0	1	3	5	0	0	0	0	0	0

The number is ☐.

Ex 37:

billions			millions			thousands			units		
H	T	U	H	T	U	H	T	U	H	T	U
3	4	0	1	2	0	0	0	0	0	0	0

The number is ☐.

C.2 WRITING NUMBERS FROM WORDS

Ex 38: One million two hundred fifty thousand is ☐.

Ex 39: Twenty-five million four hundred thousand is ☐.

Ex 40: One hundred ninety million is ☐.

Ex 41: Twenty-one billion seven hundred million is ☐.

C.3 COUNTING IN REAL-WORLD PROBLEMS

Ex 42: The Jurassic era was about one hundred and fifty million years ago. Write this number in positional notation:

☐ years ago

Ex 43: The estimated global population in 2020 was about seven billion eight hundred million people. Write this number in positional notation:

☐ people

Ex 44: Astronomers estimate that our galaxy, the Milky Way, contains about two hundred fifty billion stars. Write this number in positional notation:

☐ stars

Ex 45: The approximate average distance between the Earth and the Sun is about one hundred fifty million kilometers. Write this number in positional notation:

☐ kilometers

Ex 46: Throughout an average human lifetime, the heart beats approximately three billion times. Write this number in positional notation:

☐ heartbeats