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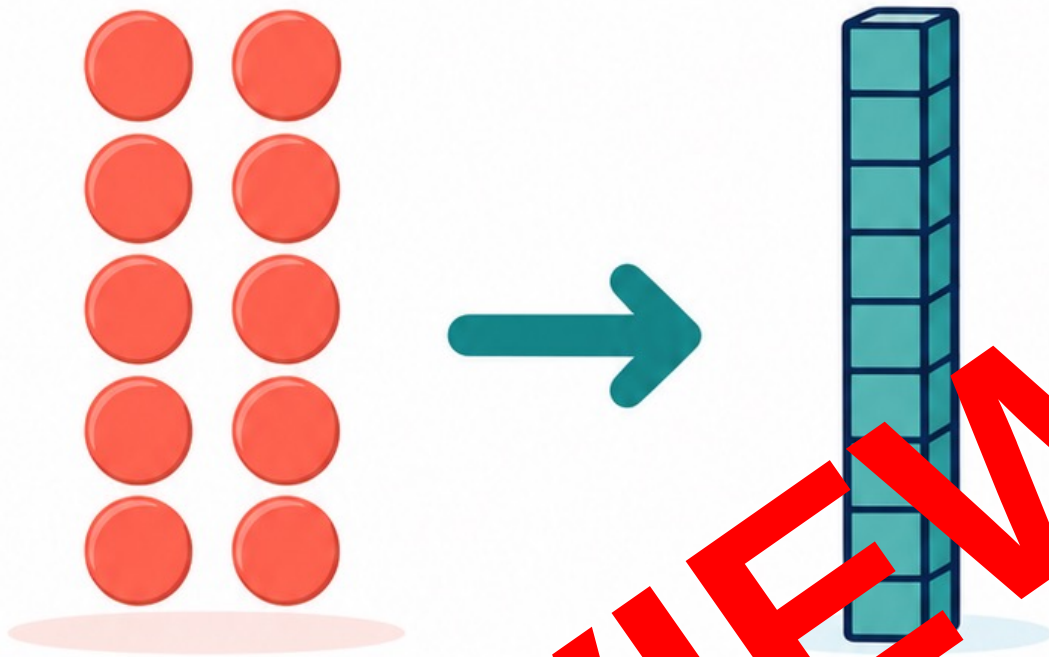


Place Value to 30 - Foundation & Year 1

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Tens and Ones



10 ones make 1 ten.

Tens	Ones
1	0



The tens digit tells how many groups of ten.



The ones digit tells how many are left.

Ways to Show 24

24

Numeral

twenty-four

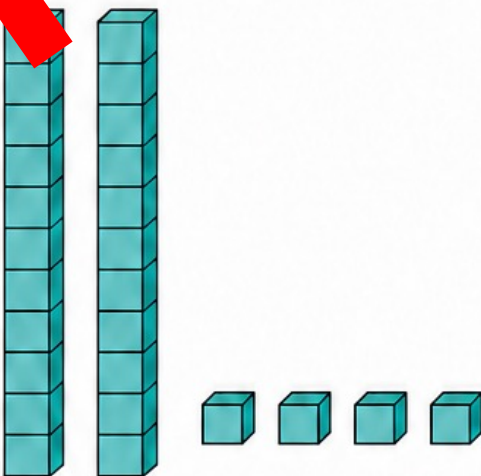
Word

2 tens and 4 ones

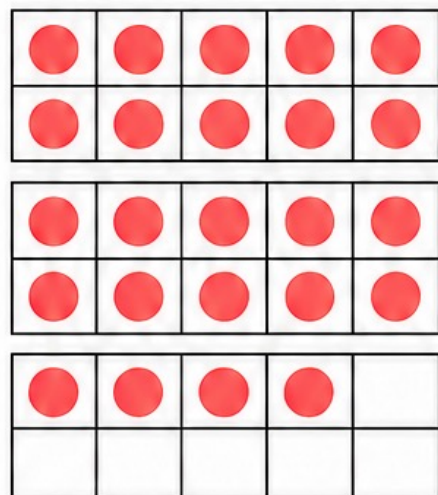
Tens and Ones

$$20 + 4$$

Expanded Form



Base-Ten Blocks



Ten Frames

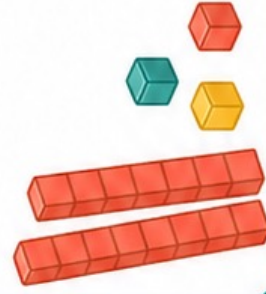
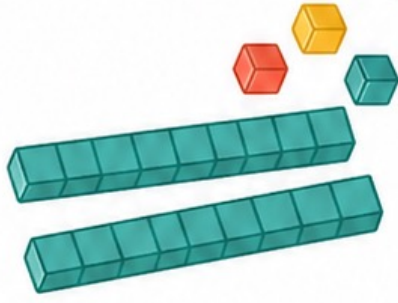
Build It to 30 – Support Mat

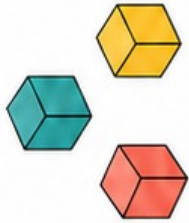
Choose a number. Build it. Count the tens and ones.

My number is

Tens

Ones





123

Build It to 30 – Core Mat

Build, draw and record one number to 30.

My number

Tens

Ones

Expanded form

Number word

Draw base-ten blocks





Place Value Match-Up



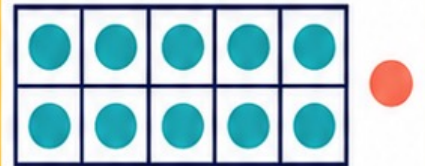
10

1 ten
and
0 ones



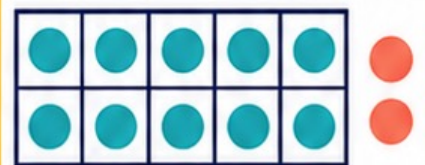
11

1 ten
and
1 one



12

1 ten
and
2 ones



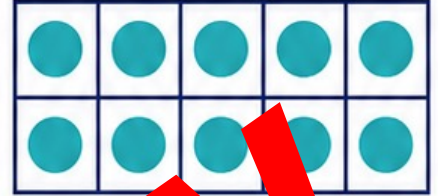
PREVIEW



Place Value Match-Up

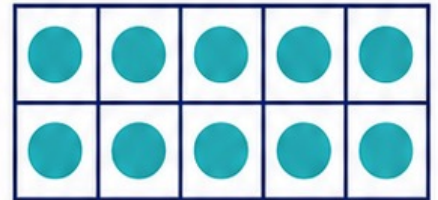
14

1 ten
and
4 ones



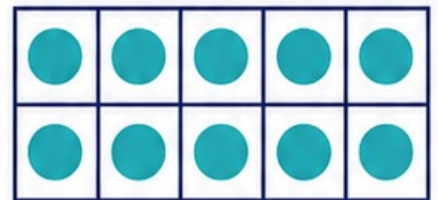
15

1 ten
and
5 ones



17

1 ten
and
7 ones

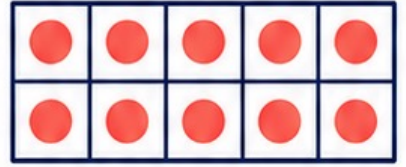


PREVIEW

Place Value Match-Up

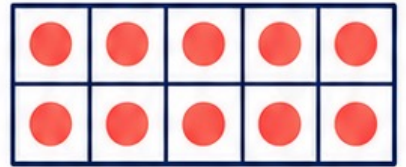
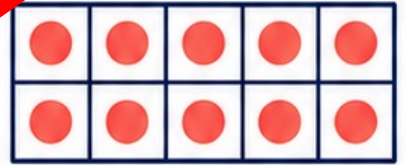
18

1 ten
and
8 ones



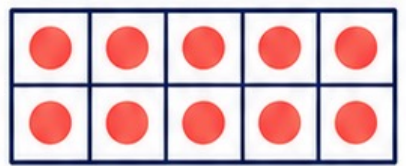
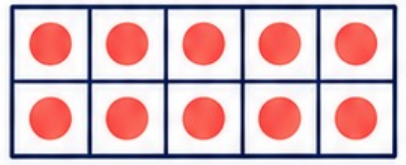
20

2 tens
and
0 ones



21

2 tens
and
1 one

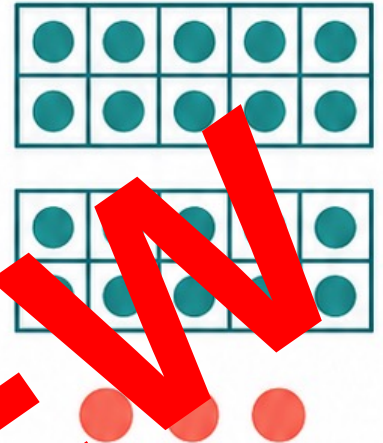


Place Value Match-Up

Mix the cards. Match each numeral, description and picture.

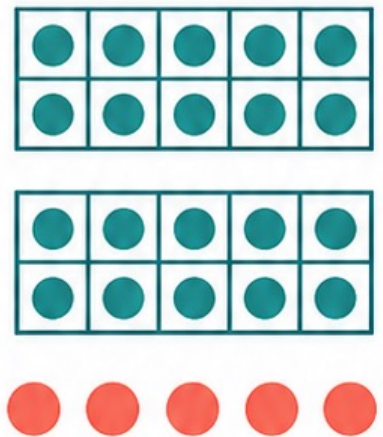
23

2 tens
and
3 ones



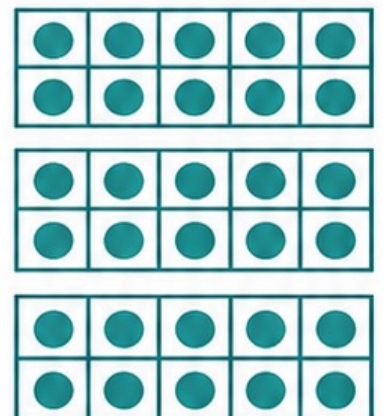
25

2 tens
and
5 ones



30

3 tens
and
0 ones



Race to 30



START

1

Build 14

3

1 ten,
8 ones

5

12

Say
the tens

20 + 4

8

2 tens,
7 ones

13

Build 20

15

3 tens,
3 ones

17

1 ten,
9 ones

30 – FINISH

Say
the ones

28

Build 30

26

24



Roll. Move. Read or build the number.
First to 30 wins.





Race to 30 — Build and Record



Player 1

Tens

Ones

Total

Build your total after each turn.



Player 2

Tens

Ones

Total

Build your total after each turn.



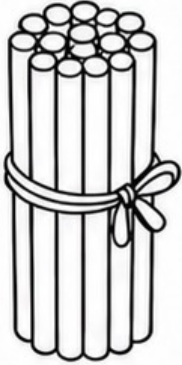


Name: _____



Bundle, Count and Write — Page 1

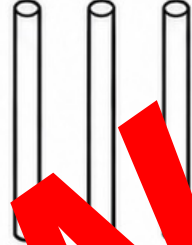
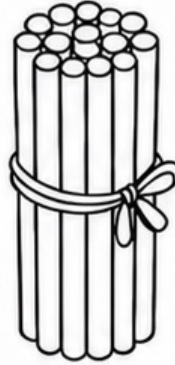
1.



Number: _____

_____ tens and _____ ones

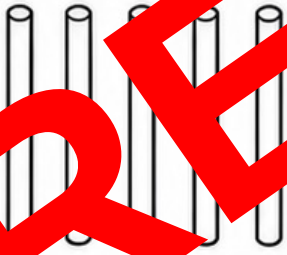
2.



Number: _____

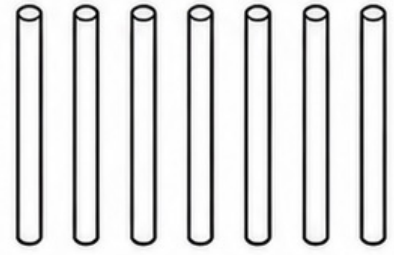
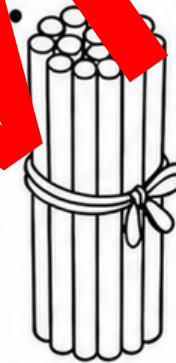
_____ tens and _____ ones

3.



Number: _____

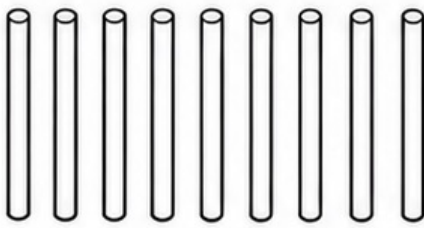
_____ tens and _____ ones



Number: _____

_____ tens and _____ ones

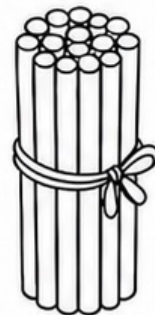
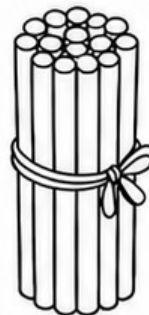
5.



Number: _____

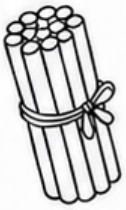
_____ tens and _____ ones

6.



Number: _____

_____ tens and _____ ones

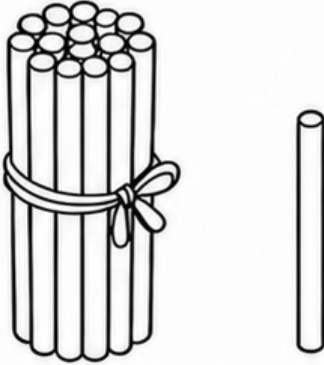


ANSWERS



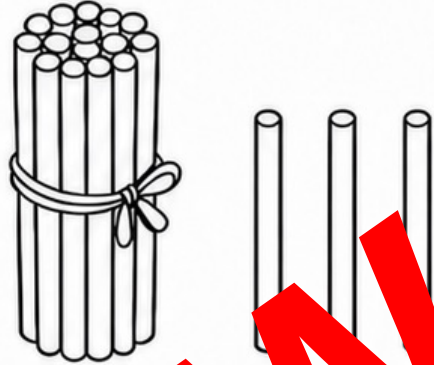
Bundle, Count and Write — Page 1

1.



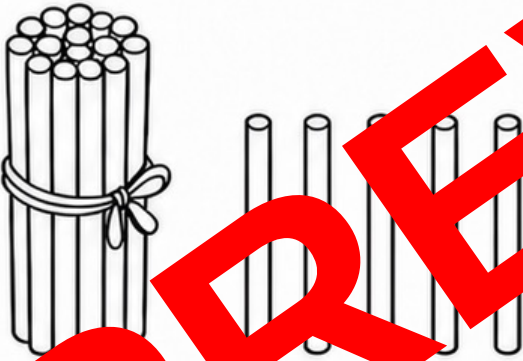
Number: 11
1 tens and 1 ones

2.

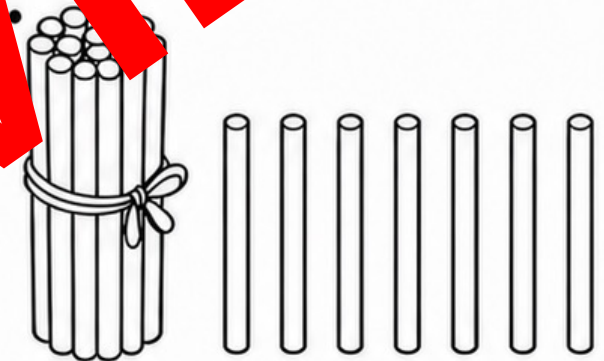


Number: 13
1 tens and 3 ones

3.

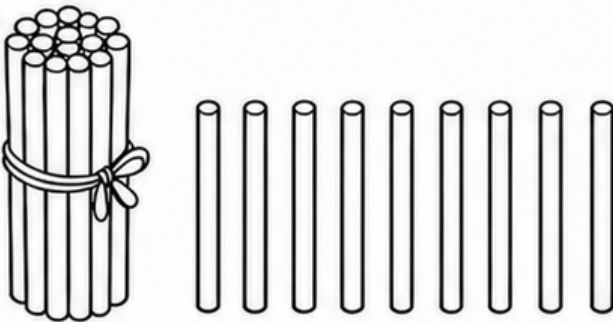


Number: 15
1 tens and 5 ones



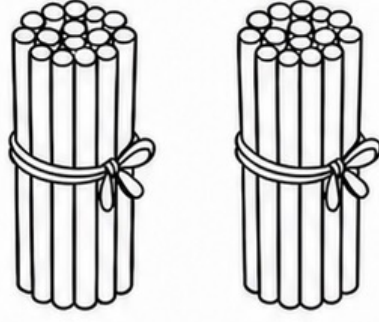
Number: 17
1 tens and 7 ones

5.

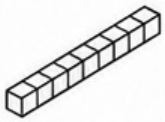


Number: 19
1 tens and 9 ones

6.



Number: 20
2 tens and 0 ones

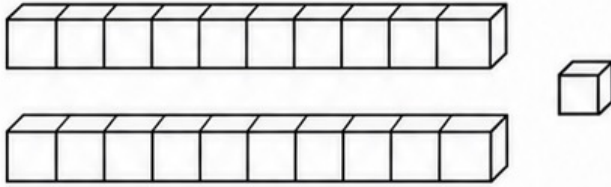


Bundle, Count and Write — Page 2



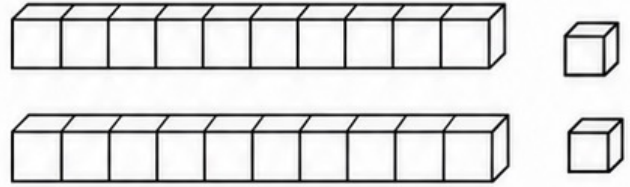
Name: _____

1.



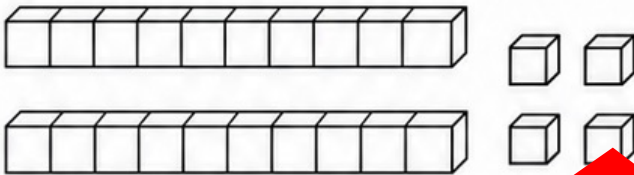
Number: ____
____ tens and ____ ones

2.



Number: ____
____ tens and ____ ones

3.



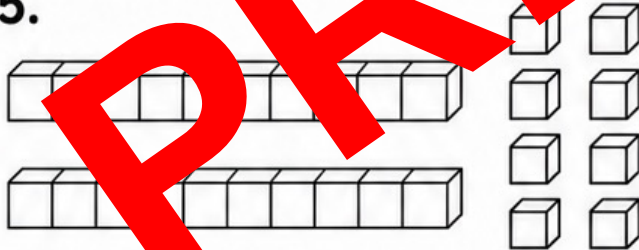
Number: ____
____ tens and ____ ones

4.



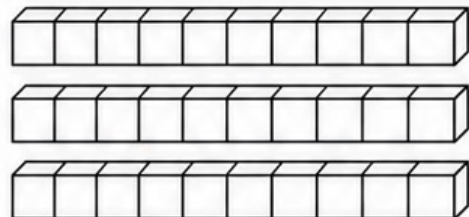
Number: ____
____ tens and ____ ones

5.



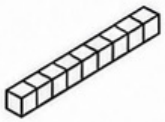
Number: ____
____ tens and ____ ones

6.



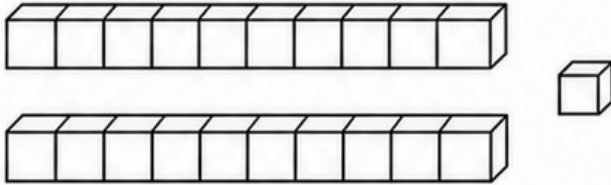
Number: ____
____ tens and ____ ones

Draw 2 tens and 5 ones.



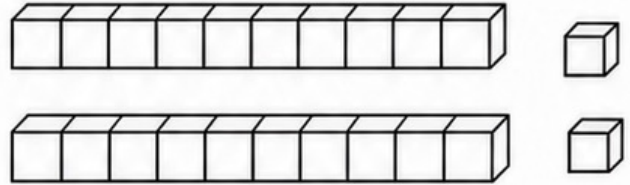
ANSWERS

1.



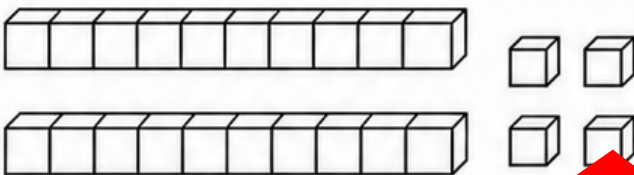
Number: 21
2 tens and 1 ones

2.



Number: 22
2 tens and 2 ones

3.



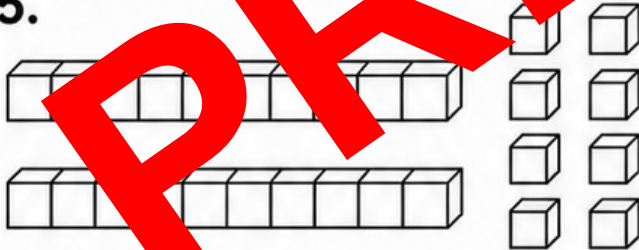
Number: 24
2 tens and 4 ones

4.



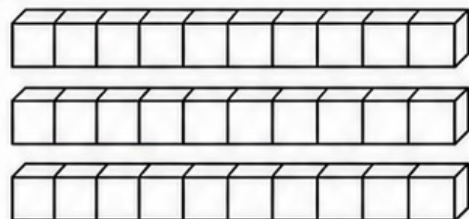
Number: 26
2 tens and 6 ones

5.



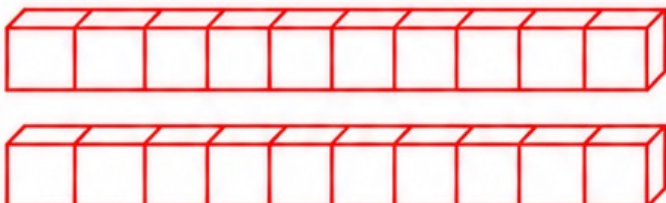
Number: 28
2 tens and 8 ones

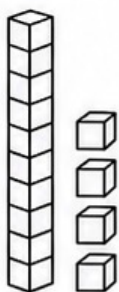
6.



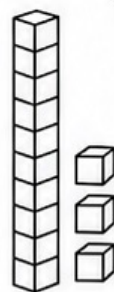
Number: 30
3 tens and 0 ones

Draw 2 tens and 5 ones.





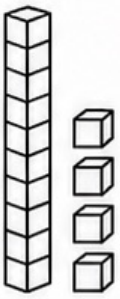
Break It Apart — Tens and Ones



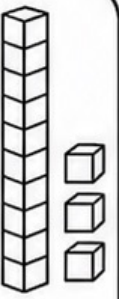
Name: _____

Complete each row.

Number	Tens	Ones	Expanded Form
12			
15			
18			
20			
23			
27			



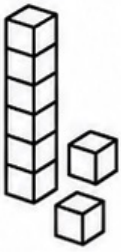
Break It Apart — Tens and Ones



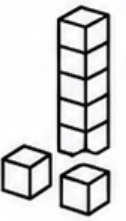
ANSWERS

Complete each row.

Number	Tens	Ones	Expanded form
12	1	2	$10 + 2$
15	1	5	$10 + 5$
18	1	8	$10 + 8$
20	2	0	$20 + 0$
23	2	3	$20 + 3$
27	2	7	$20 + 7$



Name: _____



Break It Apart – Two Ways

Complete the tens-and-ones way. Then find another way.

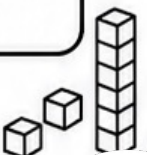
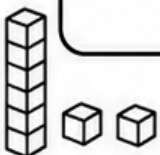
Example: $12 = 10 + 2 = 6 + 6$

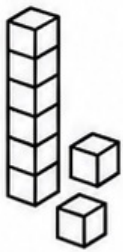
① $14 = 10 + \underline{\quad}$
 $14 = \underline{\quad} + \underline{\quad}$

② $16 = 10 + \underline{\quad}$
 $16 = \underline{\quad} + \underline{\quad}$

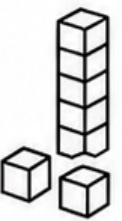
③ $20 = 20 + \underline{\quad}$
 $20 = \underline{\quad} + \underline{\quad}$

④ $28 = 20 + \underline{\quad}$
 $28 = \underline{\quad} + \underline{\quad}$





ANSWERS



Break It Apart – Two Ways

Complete the tens-and-ones way. Then find another way.

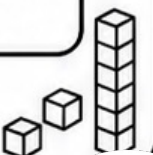
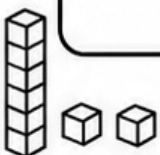
Example: $12 = 10 + 2 = 6 + 6$

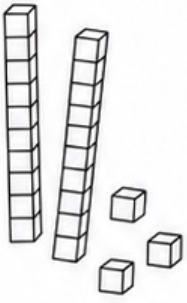
① $14 = 10 + \underline{4}$
 $14 = \underline{7} + \underline{7}$

② $16 = 10 + \underline{6}$
 $16 = \underline{8} + \underline{8}$

③ $20 = 20 + \underline{0}$
 $20 = \underline{10} + \underline{10}$

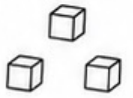
④ $28 = 20 + \underline{8}$
 $28 = \underline{14} + \underline{14}$





Name: _____

Show It Four Ways



Complete each panel to show the number in four ways.

13

Tens and ones: _____

Expanded form: _____

Number word: _____

Draw it:

19

Tens and ones: _____

Expanded form: _____

Number word: _____

Draw it:

24

Tens and ones: _____

Expanded form: _____

Number word: _____

Draw it:

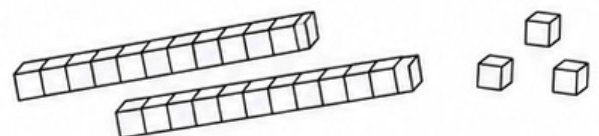
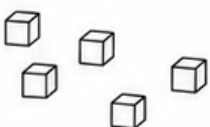
28

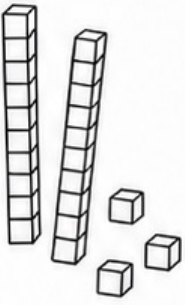
Tens and ones: _____

Expanded form: _____

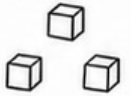
Number word: _____

Draw it:





Show It Four Ways



Complete each panel to show the number in four ways.

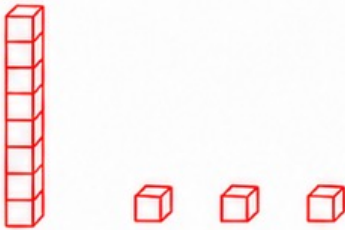
13

Tens and ones: 1 ten and 3 ones

Expanded form: $10 + 3$

Number word: thirteen

Draw it:



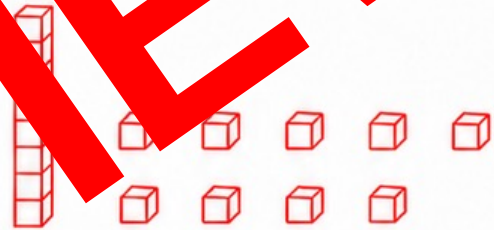
19

Tens and ones: 1 ten and 9 ones

Expanded form: $10 + 9$

Number word: nineteen

Draw it:



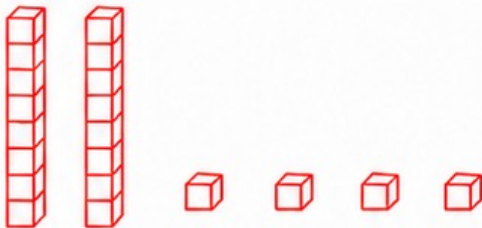
24

Tens and ones: 2 tens and 4 ones

Expanded form: $20 + 4$

Number word: twenty-four

Draw it:



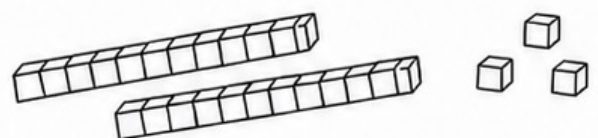
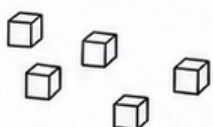
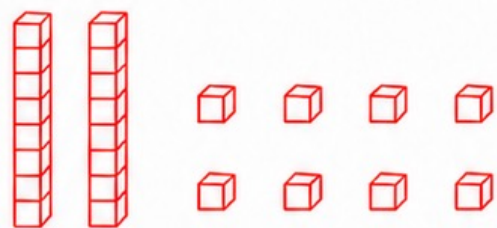
28

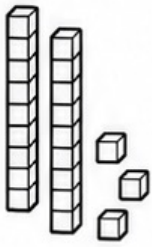
Tens and ones: 2 tens and 8 ones

Expanded form: $20 + 8$

Number word: twenty-eight

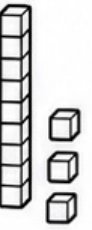
Draw it:





Compare to 30 — Page 1

Name: _____



Write $<$, $>$ or $=$ in each box.

$<$ means less than

$>$ means greater than

$=$ means equal to

1. 1 ten and 4 ones

1 ten and 8 ones

2. 2 tens and 0 ones

1 ten and 1 ones

3. 2 tens and 3 ones

2 tens and 3 ones

4. 2 tens and 7 ones

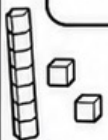
2 tens and 1 one

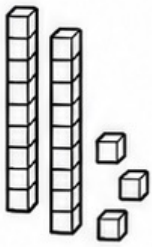
5. 1 ten and 2 ones

2 tens and 2 ones

6. 3 tens and 0 ones

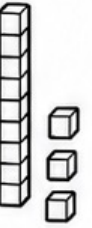
2 tens and 9 ones





Compare to 30 — Page 1

Name: ANSWERS



Write $<$, $>$ or $=$ in each box.

$<$ means less than

$>$ means greater than

$=$ means equal to

1. 1 ten and 4 ones

$<$

1 ten and 8 ones

2. 2 tens and 0 ones

$>$

1 ten and 1 ones

3. 2 tens and 3 ones

$=$

2 tens and 3 ones

4. 2 tens and 7 ones

$>$

2 tens and 1 one

5. 1 ten and 2 ones

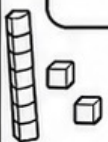
$<$

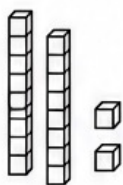
2 tens and 2 ones

6. 3 tens and 0 ones

$>$

2 tens and 9 ones





Name: _____

Order to 30 — Page 2



Write each group of numbers from least to greatest.

1. 12, 21, 18

Least to greatest: _____

2. 30, 23, 29

Least to greatest: _____

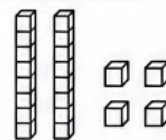
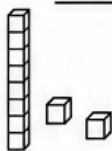
3. 17, 14, 20

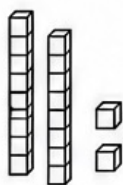
Least to greatest: _____

4. 25, 19, 24

Least to greatest: _____

How did you decide?



**Order to 30 — Page 2**

Write each group of numbers from least to greatest.

1. 12, 21, 18

Least to greatest: **12, 18, 21**

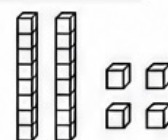
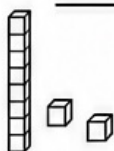
2. 30, 23, 29

Least to greatest: **23, 29, 30**

3. 17, 14, 20

Least to greatest: **14, 17, 20**

4. 25, 19, 24

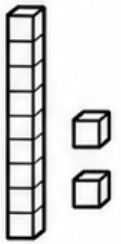
Least to greatest: **19, 24, 25****How did you decide?****I compared the tens first, then the ones.**



Name: _____

Place Value Detective

Read each clue. Write the mystery number.



1 I have 1 ten and 2 ones.

Number:

2 I have 2 tens and 0 ones.

Number:

3 I have 1 ten and 9 ones.

Number:

4 I have 2 tens and 7 ones.

Number:

5 I have 2 tens and 0 ones.

Number:

6 I am $20 + 4$.

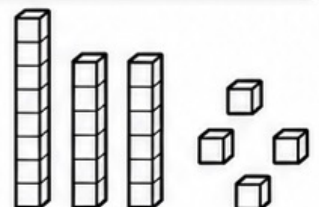
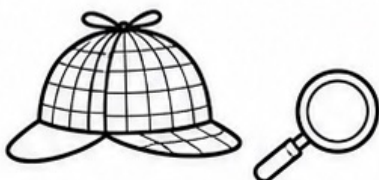
Number:

7 I am $10 + 6$.

Number:

8 I am more than 25 and less than 27.

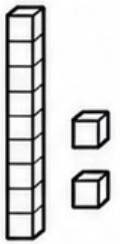
Number:





Place Value Detective

Read each clue. Write the mystery number.



- 1** I have 1 ten and 2 ones.

Number:

12

- 2** I have 2 tens and 0 ones.

Number:

20

- 3** I have 1 ten and 9 ones.

Number:

19

- 4** I have 2 tens and 7 ones.

Number:

27

- 5** I have 3 tens and 0 ones.

Number:

30

- 6** I am $20 + 4$.

Number:

24

- 7** I am $10 + 6$.

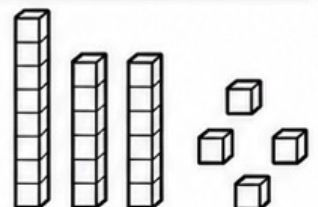
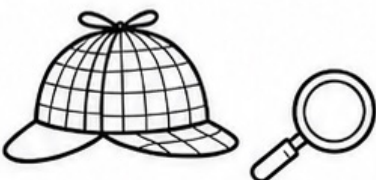
Number:

16

- 8** I am more than 25 and less than 27.

Number:

26



Place Value Check-Up — Page 1

Name: _____

Date: _____

Show what you know. Work carefully.

1. Count the blocks. Write the number.



2. Draw 23 using tens and ones.

Large empty rectangular box for drawing base ten blocks to represent the number 23.

3. Complete 18 _____ ten and _____ ones.

4. Write 27 in expanded form: _____

5. Show another way to partition 14: $14 =$ _____

6. What does the zero mean in 20?

Four horizontal lines for writing the answer to question 6.

Place Value Check-Up — Page 1

Name: ANSWERS

Date: _____

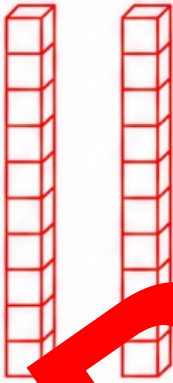
Show what you know. Work carefully.

1. Count the blocks. Write the number.



16

2. Draw 23 using tens and ones.



3. Complete 18: 1 ten and 8 ones.

4. Write 27 in expanded form: $20 + 7$

5. Show another way to partition 14: $14 =$ $7 + 7$

6. What does the zero mean in 20?

It shows there are no ones. _____

Place Value Check-Up — Page 2

Name: _____

Date: _____

Show what you know. Work carefully.

1. Compare: 19 21

Write <, > or =.

2. Compare: 28 28

Write <, > or =.

3. Order from least to greatest: 12, 20, 15

4. Mystery number: I have 2 tens and 5 ones.

Number:

5. Correct which one? 23 is 3 tens and 2 ones.

6. Choose any number from 21 to 30. Draw it and describe its tens and ones.

My number has ____ tens and ____ ones.

Place Value Check-Up — Page 2

Name: ANSWERS

Date: _____

Show what you know. Work carefully.

1. Compare: 19  21

Write $<$, $>$ or $=$.

2. Compare: 28  28

Write $<$, $>$ or $=$.

3. Order from least to greatest: 12, 20, 17

12, 17, 20

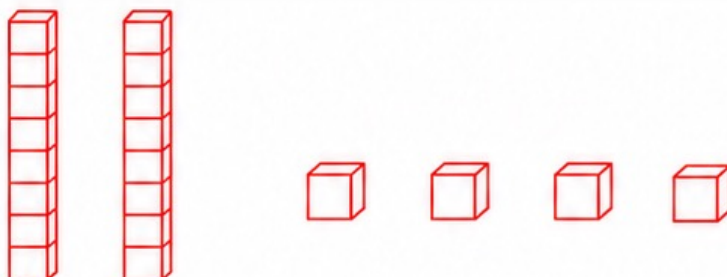
4. Mystery number: I have tens and 5 ones.

Number: 25

5. Correct which number? 23 is 3 tens and 2 ones.

23 is 2 tens and 3 ones.

6. Choose any number from 21 to 30. Draw it and describe its tens and ones.



My number has 2 tens and 4 ones.

Place Value to 30 Rubric

Name: _____

Date: _____

Curriculum focus: AC9M1N02

CRITERIA	BEGINNING	DEVELOPING	ACHIEVING	CONFIDENT	EXCEEDING
Represents numbers to 30	Needs support to make numbers.	Makes numbers with prompts.	Makes numbers to 30 accurately.	Uses several representations accurately.	Chooses and explains efficient representations.
Identifies tens and ones	Needs support to find tens and ones.	Identifies tens or ones with prompts.	Identifies tens and ones accurately.	Connects each digit to its place value.	Explains zero and renames one ten.
Partitions numbers in different ways	Needs support to split a number.	Splits numbers one way with prompts.	Partitions numbers in several valid ways.	Records several valid partitions.	Explains why the partitions are equal.
Compares and orders	Needs support to compare numbers.	Compares with materials or prompts.	Compares and orders numbers to 30.	Uses $<$, $>$ and $=$ accurately.	Justifies an efficient ordering strategy.
Explains reasoning	Gives a limited explanation.	Gives a short prompted explanation.	Explains using tens and ones.	Uses maths language and evidence.	Generalises and checks the reasoning.

Place value to 30



We Are Learning To:

build numbers to 30

partition numbers in tens and ones

compare numbers and explain our thinking



Digits Have a Place

A digit tells us how many.
Its place tells us what it is worth.

In 24, the 2 means 2 tens.

The 4 means 4 ones.



Ten Ones Make One Ten

Ten separate ones can be bundled together.

10 ones = 1 ten

The count stays the same.



Tens and Ones

The tens digit shows complete groups of ten.

The ones digit shows what is left.

$24 = 2$ tens and 4 ones



Read 14

Look at 14.

1 is in the tens place: 1 ten.

4 is in the ones place: 4 ones.

$$14 = 10 + 4$$



Build 14

Start with one ten rod
Add four unit cubes.

$$1 \text{ ten} + 4 \text{ ones} = 14$$



Read and Build 20

20 has 2 tens and 0 ones.

$$20 = 20$$

No ones are left over.



Zero Matters

10 has 1 ten and 0 ones.

20 has 2 tens and 0 ones.

30 has 3 tens and 0 ones.

Zero tells us there are no ones.



Partition 16

A number can be partitioned in different ways.

$$16 = 10 + 6$$

$$16 = 8 + 8$$

Both parts make the same whole.



Your Turn: Build 18

Build 18 with ten and ones.

How many tens?

How many ones?



Answer: 18

18 = 1 ten and 8 one

$$18 = 10 + 8$$



Your Turn: Show 27

Show 27 in two ways.

Use tens and ones.

Then write in expanded form.



Answer: 27

27 = 2 tens and 7 ones

$$27 = 20 + 7$$



Compare 24 and 19

24 has 2 tens.

19 has 1 ten.

2 tens is greater than 1 ten.

So $24 > 19$.



Mystery Number

I have 2 tens and 3 ones.

I am greater than 20.

What number am I?



What We Learned

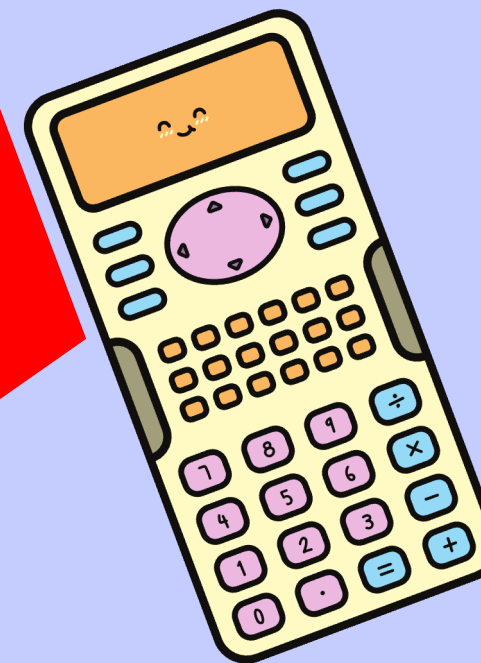
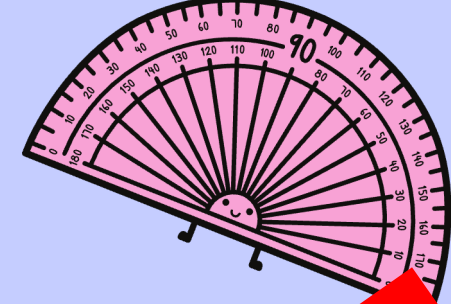
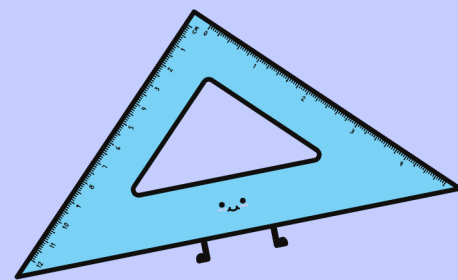
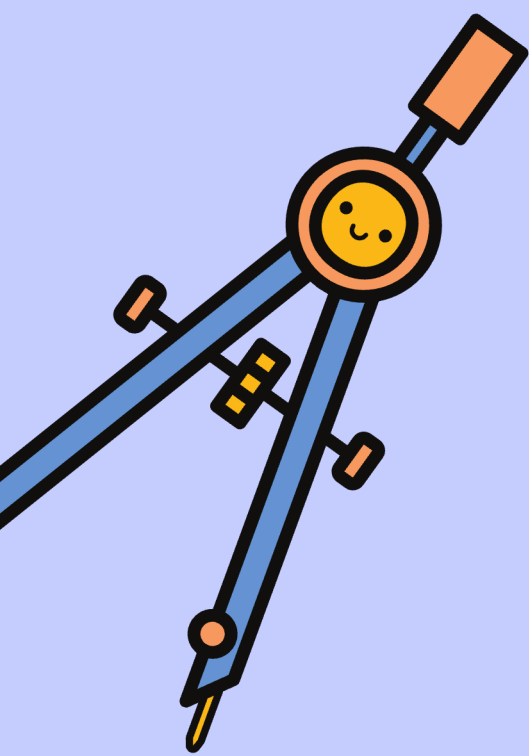
build and read numbers to 30

name ten and ones

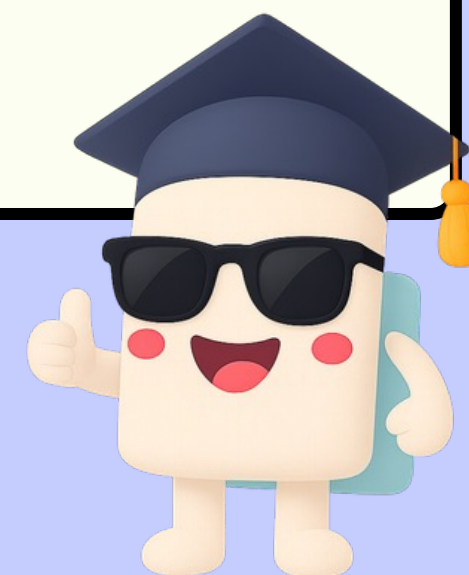
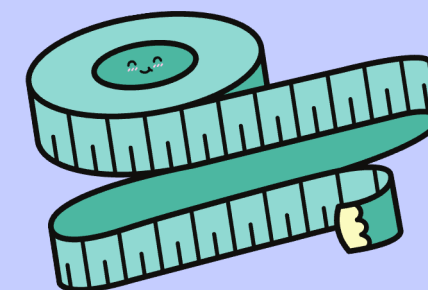
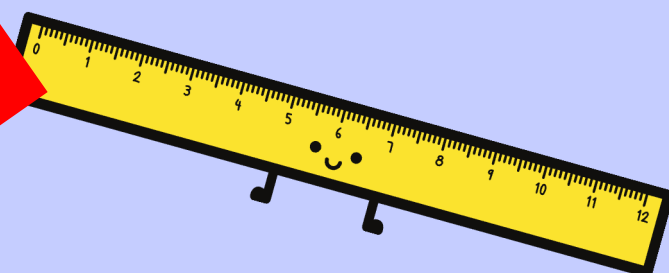
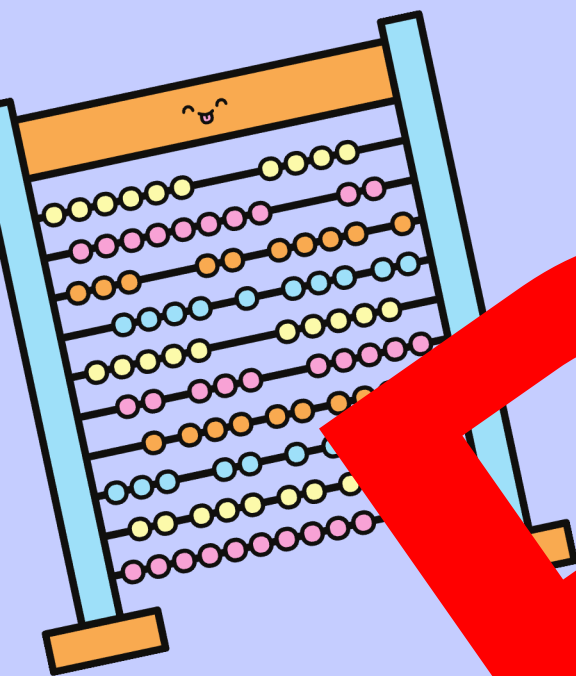
partition numbers in different ways

compare order and explain





Well Done!



Place Value to 30 Quiz



Question 1

Which description matches 14?

A. 14 tens and 1 ones

B. 1 ten and 4 ones

C. 14 tens and 1 one

D. 1 ten and 14 ones



Answer 1

Put ones

$$14 - 10 + 4.$$



Question 2

2 tens and 3 ones make what number?



Answer 2

23

2 tens = 20 and $20 + 3 = 23$.



Question 3

True or false?

2 has 2 tens and 0 ones.



Answer ?

True

is 2 ms. There are no extra ones.



Question 11

Which numeral matches 1 ten and 8 ones?

A. 18

B. 18

C. 21

D. 28



Answer !!

18

ten and 8 ones = 18.



Question 5

Position 27 into tens and ones.



Answer 5

2 tens and 7 ones

It is 2 tens and 7 ones.



Question 6

True or false?

and have the same place value.



Answer 6

False

12 has 1 ten and 2 ones.

2 has 2 tens and 1 one.



Question 7

Which representation shows 33?

- A. 3 ones
- B. 1 ten and 3 ones
- C. 3 tens and 0 ones
- D. 2 tens and 3 ones



Answer 7

3 tens and 0 ones

$$3 \text{ tens} = 30.$$



Question 8

Complete the number sentence.

$$20 - 6 = \underline{\quad}$$



Answer 8

26

$$20 + 6 = 26.$$



Question 1

True or false?

There are more tens than 24.



Answer a

False

4 has 2 tens. 19 has 1 ten.



Question 10

Which number is greatest?

A. 10

B. 21

C. 27

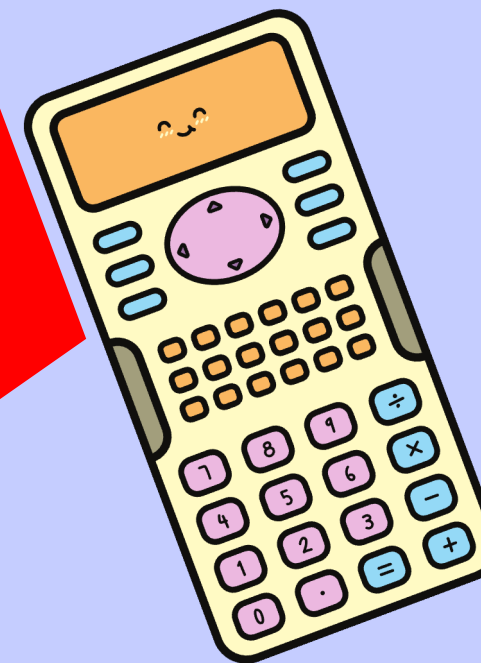
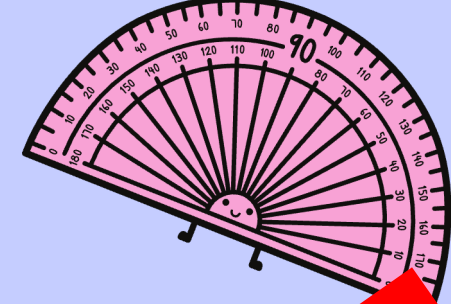
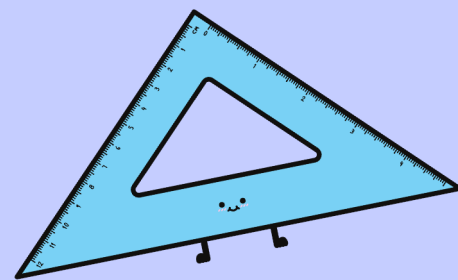
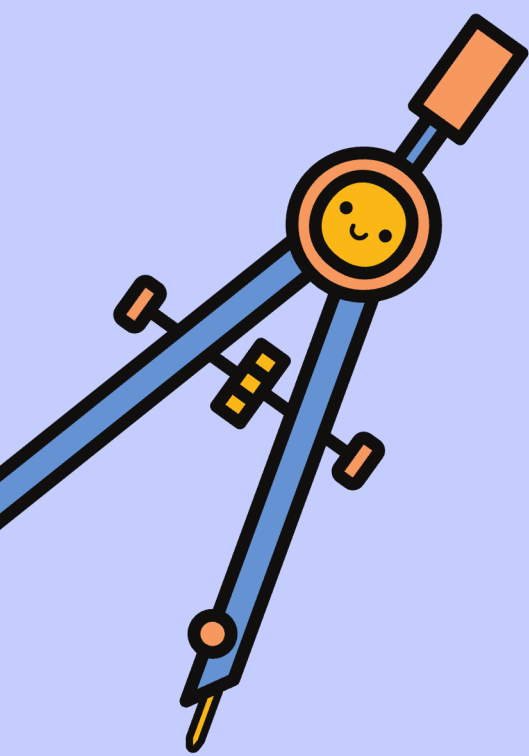
D. 20



Answer 10

27 is 2 times 7 and 7 times, so it is the greatest.





Well Done!

