

NUMERACY GAMES: MASTERS

A South African Numeracy Chair Project initiative



ACKNOWLEDGEMENTS

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SCOOT RESOURCES



SCOOT Recording Sheet (20 questions)



1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	18	20



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SCOOT Recording Sheet (10 questions)



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16	17	18	19	20
21	22	23	24	25
26	27	28	29	30

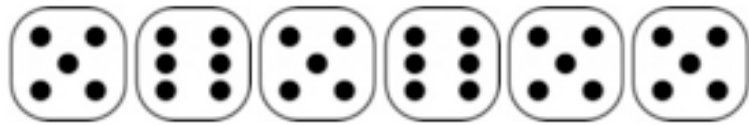
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30



1 32	2 a) $4 \times 4 \times 4$	3 99	4 500	5 20
6 498	7 a) 12×12	8 297	9 340	10 148
11 156	12 13	13 130°	14 -0.25	15 $\text{£}) \frac{7}{12}$
16 a) $\frac{1}{2}$ and 0.5	17 2060	18 100°	19 480	20 4 spiders to 2 snakes or
21 90°	22 71	23 -45; -60	24 -20	25 -2500
26 60°	27 101	28 750; 1000	29 20	30 28

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How many dots?



1

2

Add 10 to 297

Quick thinking. Try not to work it out.

If $14 - 9 = 5$

what is $74 - 9$?

3

4

What number is shown by the arrow on the number line



Quick thinking. Try to find a quick way.

If 3 sets of 8 = 24

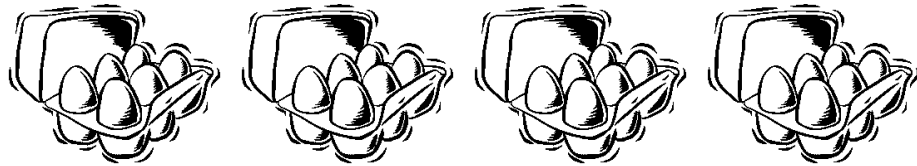
what is 8 sets of 3?

5

6

Add 100 to 398

How many?



Quick thinking. Try to find a quick way.

$$99 + 99 + 99 =$$

Half 50, then take away 10, then add 100

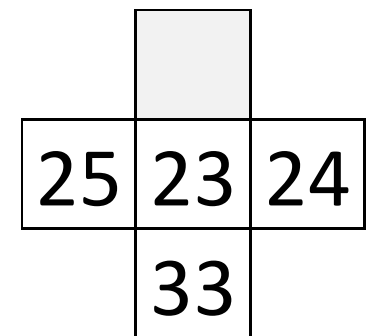
Quick thinking. Try to find a quick way.

$$\text{If } 23 + 125 = 148$$

What is $123 + 25$?

Quick thinking. Try to find a quick way.

What is the missing number?



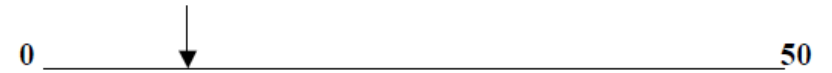
If 3 sets of 4 = 12
what is 4 sets of 3?

How many?



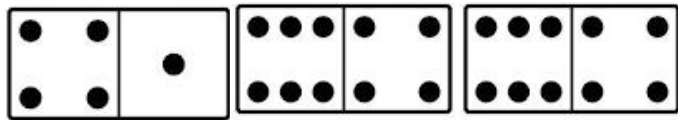
13

What number is shown by the arrow on the number line



14

How many dots altogether?



15

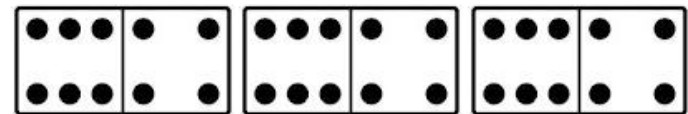
$$200 + 200 + 200 + 64 =$$

16

$$\text{Double } 100 + \text{half of } 12 =$$

17

How many dots altogether?



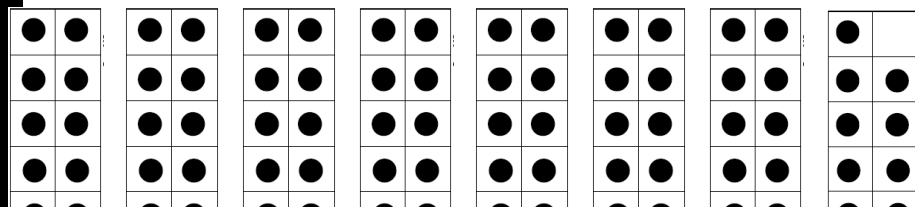
18

Quick thinking. Try to find a quick way.

$$\text{If } 23 + 25 = 48$$

What is $230 + 250$?

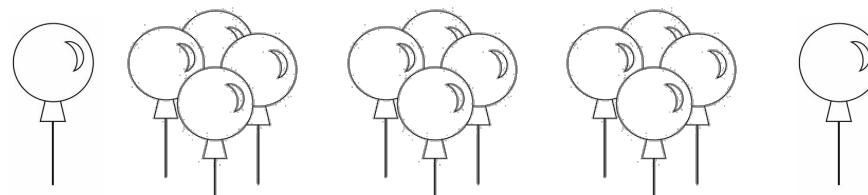
How many?



Fill in the blanks:

15; 30; _____; _____; 75

How many?



Add these numbers together:

6; 4; 6; 4; 5; 5; 2; 8; 1

Which is the smallest number?

20; 35; 15; 50

19

Extra 1

Extra 3

20

Extra 2

Extra 4

Extra 5

What number is shown on this number line?



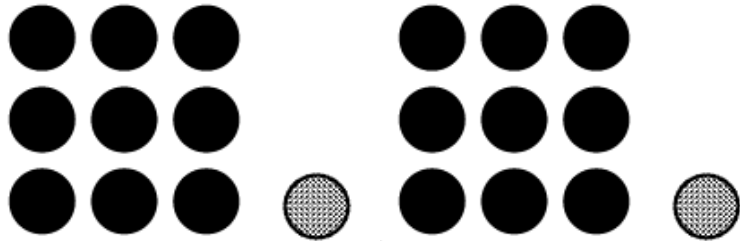
Extra 7

Which is the biggest number?

10; 100; 101; 11

Extra 9

How many?



Extra 6

What are the missing numbers?

59	
	70
	80

Extra 8

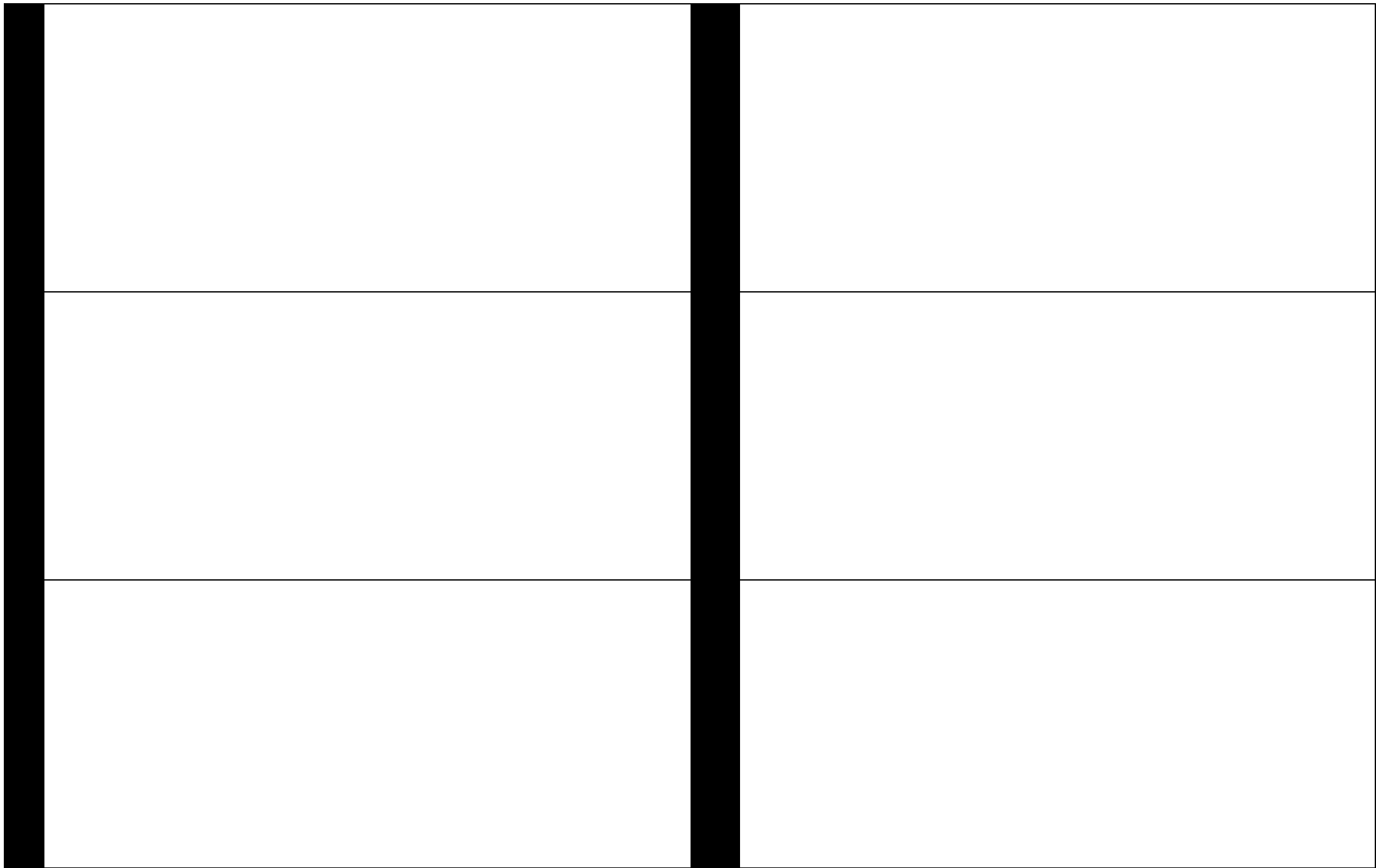
Fill in the blanks:

25; 50; ____; ____; 125

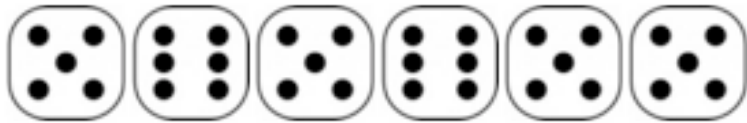
Extra 10

What is the missing number?

	9	10
	19	
		30



How many dots?



1

$$4^3 = ?$$

$$4 \times 4 \times 4$$

or

$$4 \times 3$$

2

Quick thinking. Try not to work it out.

$$\text{If } 33 + 99 = 132$$

what is $132 - 99$?

3

What number is shown by the arrow on the number line



4

Quick thinking. Try to find a quick way.

$$\text{If } 20 \times 6 = 120$$

what is $120 \div 6$?

5

6

Add 100 to 398

7

$$12^2 = ?$$

$$12 \times 12$$

or 12×2

9

Half 500
then take away 10
then add 100

11

Quick thinking. Try to find a quick way.

If $12 \times 12 = 144$
what is 13×12 ?

8

Quick thinking. Try to find a quick way.

$$99 + 99 + 99 =$$

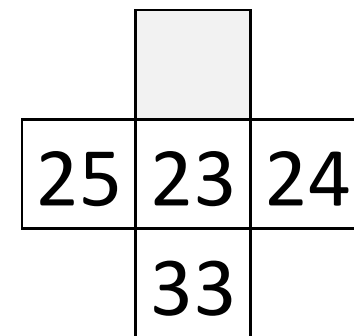
10

Quick thinking. Try to find a quick way.

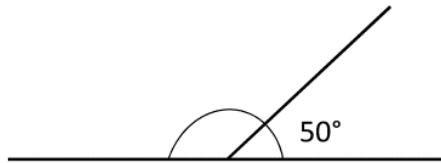
If $23 + 125 = 148$
What is $123 + 25$?

12

What is the missing number?

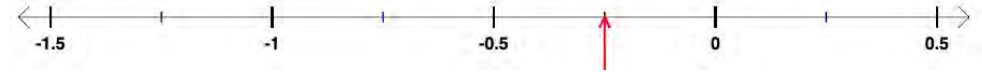


Find the value of the missing angle



13

What number is shown by the arrow on the number line



14

I am more than half
My denominator is even
I am not equal to $\frac{3}{4}$
Who am I?

A $\frac{2}{3}$	B $\frac{3}{4}$	C $\frac{2}{4}$
D $\frac{4}{8}$	E $\frac{7}{12}$	F $\frac{6}{8}$

15

What has the same value as:
50%?

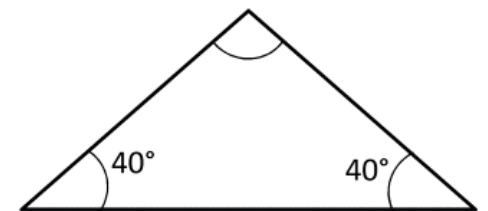
$\frac{1}{2}$ and 0.5 OR
 $\frac{1}{5}$ and 50

16

Double 1000
+
half of 120 =

17

Find the value of the missing angle



18

19

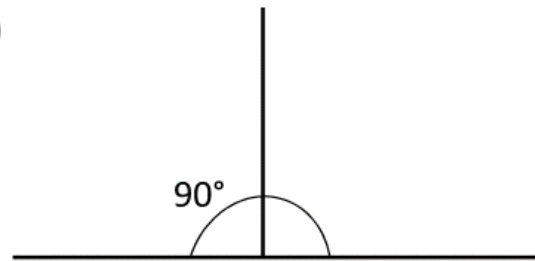
Quick thinking. Try to find a quick way.

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21

Find the value of the missing angle



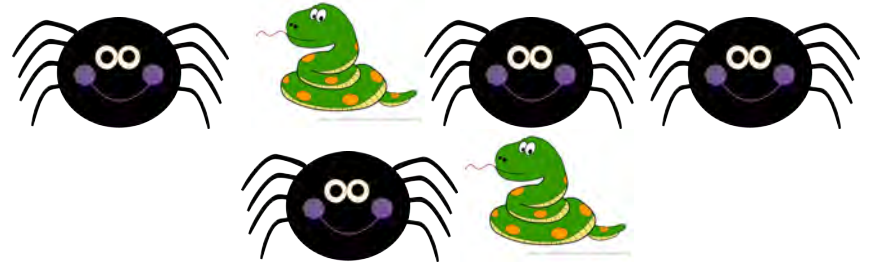
Fill in the blanks:

-15; -30; ____; ____; -75

23

20

What is the ratio of spiders to snakes?



22

Add these numbers together:

16; 4; 6; 14; 5; 5; 2; 18; 1

24

Which is the **SMALLEST** number?

-20; 35; -15; 50

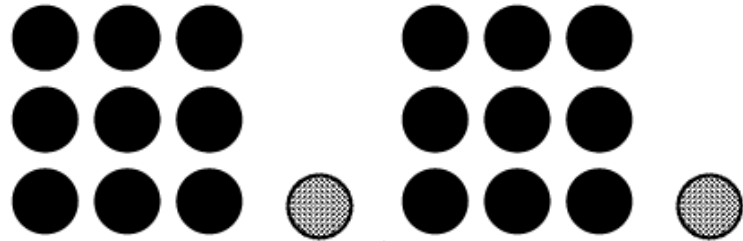
What number is shown on this number line?



Which is the **BIGGEST** number?

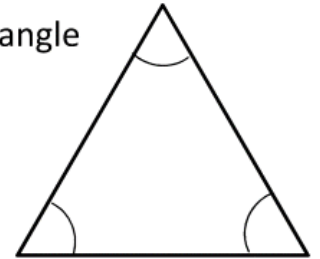
-10; -100; 101; 11

How many?



What are the values of the angles?

Equilateral triangle



Fill in the blanks:

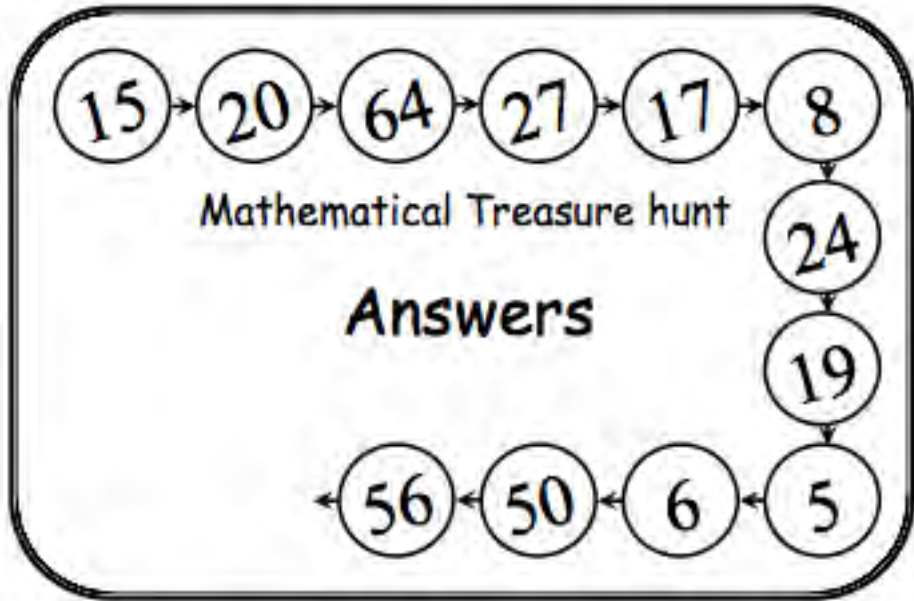
250; 500; ___; ___; 1250

What is the missing number?

	9	10
	19	
		30



MATHEMATICAL TREASURE HUNT RESOURCES



If you wish to change the questions in the game, you can edit the original document which is available for download from the Treasure Hunt link on the SANC Project website at: <http://www.ru.ac.za/sanc/mathsclubs/clubresources/games/>

EXAMPLE CARDS TO EXPLAIN THE GAME TO LEARNERS BEFORE IT STARTS

→ 12 Previous Answer
Mathematical Treasure hunt EXAMPLE

How many dots altogether?

? To the next clue

→ 24 Previous Answer
Mathematical Treasure hunt EXAMPLE

Add 10 to 23 ...

? To the next clue

→ 33 Previous Answer
Mathematical Treasure hunt EXAMPLE

How many tens in 235?

? To the next clue

→ 3 Previous Answer
Mathematical Treasure hunt EXAMPLE

What's the missing number?
3, 6, 9, __, 15

? To the next clue

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

Mathematical Treasure hunt

Name:

Answer Sheet

END

Start here →

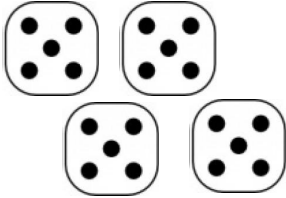
Mathematical Treasure hunt

Name:

Answer Sheet

END

→ **15** Previous Answer Mathematical Treasure hunt



How many dots altogether?

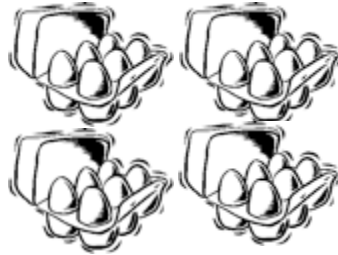
? → To the next clue

→ **20** Previous Answer Mathematical Treasure hunt

Add 10 to 54 ...

? → To the next clue

→ **64** Previous Answer Mathematical Treasure hunt



How many eggs?
Add 3 more
How many now?


? → To the next clue

→ **27** Previous Answer Mathematical Treasure hunt

Take 100 away from 117

? → To the next clue

→ **17** Previous Answer Mathematical Treasure hunt



How many cakes?
Take away 4
How many now?

? → To the next clue

→ **8** Previous Answer Mathematical Treasure hunt

If $9 - 5 = 4$
and
 $19 - 5 = 14$

What is $29 - 5$?


? → To the next clue

→ **24** Previous Answer Mathematical Treasure hunt

Take 10 away from 29 ...

? → To the next clue

→ **19** Previous Answer Mathematical Treasure hunt



What number is shown by the arrow?

? → To the next clue

→ **5** Previous Answer Mathematical Treasure hunt

I have 14
How many
more to make
20?

? →
To the next clue

→ **6** Previous Answer Mathematical Treasure hunt

Double 21
plus 8 is ...?

? →
To the next clue

→ **50** Previous Answer Mathematical Treasure hunt

Add 10 to
46

? →
To the next clue

→ **56** Previous Answer Mathematical Treasure hunt

How many
boxes
altogether?

? →
To the next clue