

Bayreuth Arithmetic Test

for the assessment of basic mathematical
competences

– test booklet –

name: _____

class: _____

date: _____

result: _____ of 60 points $\triangleq$ _____ %

I. Understanding natural numbers

___ / 16

Task 1

Tick the correct answer.

a) Mia has 26 sweets; Klaus has 31 sweets. Which statement is true?

- ☐ Mia has more sweets than Klaus.
- ☐ Mia has fewer sweets than Klaus.
- ☐ Klaus has fewer sweets than Mia.

b) Ida has 92 sweets; Tom has 83 sweets. Which statement is true?

- ☐ Ida has 92 sweets more than Tom.
- ☐ Tom has 83 fewer sweets than Ida.
- ☐ Ida has 9 more sweets than Tom.

___ / 2

Task 2

Tick the correct answer.

a) A large deciduous tree has 70 leaves in the summer.

- ☐ That's few.
- ☐ That's normal.
- ☐ That's a lot.

b) 1000 blades of grass grow in a meadow.

- ☐ That's few.
- ☐ That's normal.
- ☐ That's a lot.

___ / 2

Task 3

Fill in the missing numbers.

a) Count forwards from the given number in steps of ten.

1 973 _____ _____ _____ _____ _____

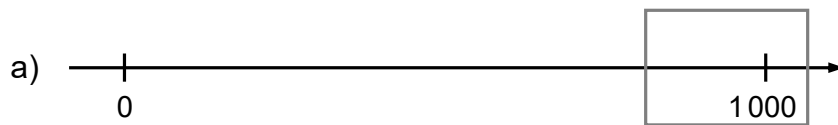
b) Count backwards from the given number in steps of three.

107 _____ _____ _____ _____ _____

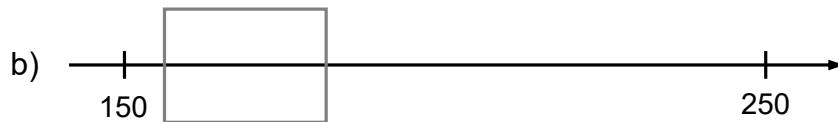
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Task 4

Tick the number that lies in the marked section of the number line.



- 562
- 983
- 1 434
- 1 762



- ☐ 132
- ☐ 151
- ☐ 167
- ☐ 214

1 / 2

Task 5

Fill in the blanks to form a correct equation. There are several options from which you can choose a suitable one.

Example: $18 = 12 + 6$ or $18 = 9 + 9$

a) $37 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

$$37 = 12 + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

b) $1\,000 = \underline{\hspace{2cm}} + 500 + \underline{\hspace{2cm}}$

$$1\,000 = 100 + \underline{\hspace{2cm}} + 20 + \underline{\hspace{2cm}}$$

 / 4

Task 6

Write down the result.

a) Double 39. Result: _____

b) Double 508. Result: _____

c) Half of 76. Result: _____

d) Half of 340. Result: _____

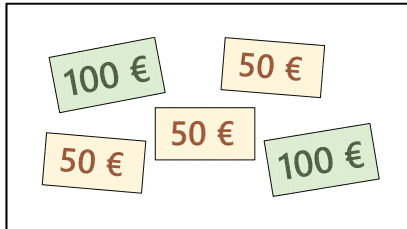
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Space for thoughts:

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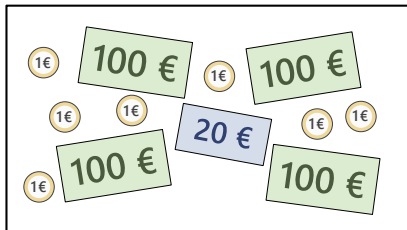
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a)



You receive _____
ten-euro notes.

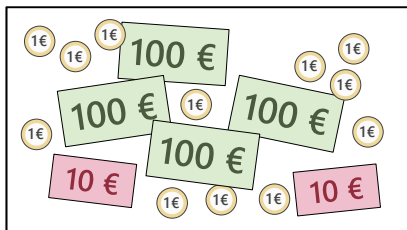
b)



You receive _____
ten-euro notes.

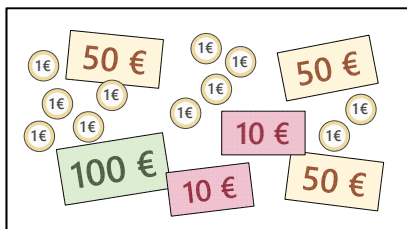
1 / 2

a)



It is a total of _____ Euros.

b)



It is a total of _____ Euros.

1 / 2

[illegible]

Task 9

Write the number in figures.

- a) The number has 3 tens, 7 thousands und 2 ones.

→ The number is _____.

- b) The number has 37 hundreds, 4 ones und 5 thousands.

→ The number is _____.

1 / 2

Task 10

Write down the result.

a) $923\,399 + 1 = \underline{\hspace{2cm}}$

b) $400\,999 + 100 = \underline{\hspace{2cm}}$

c) $600\,000 - 100 = \underline{\hspace{2cm}}$

d) $317\,000 - 1 = \underline{\hspace{2cm}}$

1 / 4

Space for thoughts:

[illegible]

Task 11

„Greater than“, „less than“ or „equal to“? Tick the correct answer.

- | | | | |
|----|-----------|--|----------------|
| a) | 3 607 | ☐ is greater than
☐ is equal to
☐ is less than | 3 067 |
| b) | 1 095 | ☐ is greater than
☐ is equal to
☐ is less than | $995 + 10$ |
| c) | 999 | ☐ is greater than
☐ is equal to
☐ is less than | $10\,000 - 10$ |
| d) | $106 - 8$ | ☐ is greater than
☐ is equal to
☐ is less than | $16 + 8$ |

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Task 12

Write down the result. The given calculation will help you.

- a) $27 + 34 = 61$
 $27 + 5\,134 = \underline{\hspace{2cm}}$
- b) $2\,354 - 567 = 1\,787$
 $23\,540 - 5\,670 = \underline{\hspace{2cm}}$

12

Space for thoughts:

[illegible]

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_____ / 3

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1 / 2

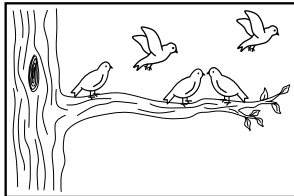
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Task 16

- a) Which two maths stories match the calculation $12 - 4$? Tick the two matching boxes.

	Alina has 12 sweets. She receives 4 sweets as a gift from Julian.
	Alex has 12 sweets. Moritz has 4 sweets fewer than Alex.
	Felix has 12 sweets. He gives Hanna 4 sweets.
	Tim gives away 12 sweets to his friends. Everyone should receive 4 sweets.

- b) Fill in the numbers so that the task matches the picture.



Task: _____ – _____

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Task 17

Write down the result.

a) $73 - 37 =$ _____ b) $603 - 598 =$ _____

— / 2

Task 18

Fill in the blank to form a correct equation.

a) $50 - \underline{\hspace{2cm}} = 26$ b) $\underline{\hspace{2cm}} - 87 = 123$

— / 2

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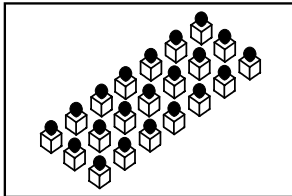
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Task 19

- a) Which two maths stories match the calculation $12 \cdot 4$? Tick the two matching boxes.

	12 friends meet. Each of the friends has 4 sweets.
	Tina has 3 sweets. Kurt has 4 times as many sweets as Tina.
	Markus buys 4 sweets every day for 12 days.
	Tim gives 12 sweets to his friends. Each one is supposed to receive 4 sweets.

- b) Fill in the numbers so that the task matches the picture.



Task: _____ . _____

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Task 20

Write down the result.

- a) $7 \cdot 80 =$ _____ b) $39 \cdot 4 =$ _____

___ / 2

Task 21

Fill in the blank to form a correct equation.

- a) $40 \cdot \underline{\hspace{2cm}} = 240$ b) $\underline{\hspace{2cm}} \cdot 15 = 135$

___ / 2

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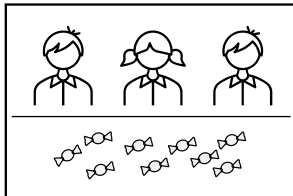
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Task 22

- a) Which two maths stories match the calculation **12 : 4**? Tick the two matching boxes.

	4 sweets are distributed among 12 friends.
	4 friends share 12 sweets. All the friends receive the same number of sweets.
	Markus buys 4 sweets every day for 12 days.
	Tim packs 12 sweets into bags. He puts 4 sweets in each bag.

- b) Fill in the numbers so that the task matches the picture.



Task: _____ : _____

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Task 23

Write down the result.

- a) $72 : 9 =$ _____ b) $275 : 25 =$ _____

— / 2

Task 24

Fill in the blank to form a correct equation.

- a) $108 : \underline{\hspace{2cm}} = 9$ b) $\underline{\hspace{2cm}} : 7 = 7$

2 / 2

Space for thoughts:

[illegible]