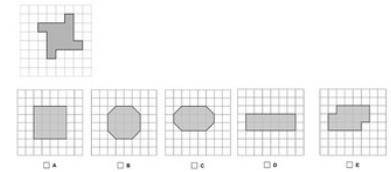


1. On a grid, Rui represented the following figure. The figures A, B, C, D and E are shown on a grid equal to the previous one. Write the letter all the figures that have an area equal to the figure that Rui represented.

- 8/53 A D and E
- 0/53 B A and C
- 27/53 C C and E
- 3/53 D A, B and E
- 2/53 E A, B, D and E



2. Inês's school vegetable garden is rectangular. The smaller side measures 6 meters. The larger side is three times the length of the smaller side. Each class cultivates a square flowerbed. The side of this square measures 3 meters. The whole vegetable garden is being cultivated. How many classes grow the vegetable garden?

Bulgaria, Martin

15

Zosia - Poland

12

Bilgaria, Monika

12

Maksymilian-Poland

12

Lithuania Arnoldas

12

WERONIKA-POLEN

12 class

Sara Hipólito

12

BARROS1964

6



Kinga- Poland

✓ 12

Portugal-Maria

✓ 12

Clara

✗ 36

Lithuania, Dominika

$$3 \times 6 = 18$$

$$3 \times 3 = 9$$

$$6 \times 18 / 9 = 12$$

✗ 12 classes grow the vegetable garden.

Lithuania Donatas Verbickas

$$1. 3 \times 6 = 18$$

$$2. 3 \times 3 = 9$$

✗ 3. 12

Nilsu karaburun

✓ 12

Bartu özkan

✗ -

Bartu özkan

✓ 12

Rui

✓ 12

Utku aydoğan

✓ 12

Bulgaria, Stanimir

✓ 12

Nikodem-Poland

✗ 12 classes

Mustafa sefa Çiftli

✓ 12

Bulgaria, Nazar

✓ 12

Portugal-Inês

✗ 12 classes

Portugal_AnaLuiza

✓ 12

PORTUGAL-LIA

✓ 12

Bulgaria

✓ 12

Lithuania Ieva

$$6 \cdot 3 = 18\text{m}$$

$$3 \cdot 3 = 9$$

$$6 \cdot 18 / 9 = 12$$

✗ answer is 12 classes grow in the vegetable garden

Portugal_Laura

✗ 36

Nilsu

✓ 12

Öykü özbucağ

✓ 12

Lithuania, Karina Butrimaite

$$\text{The larger side is } 3 \times 6 = 18$$

$$\text{Square flowerbed is } 3 \times 3 = 9$$

$$6 \times 18 / 9 = 12$$

✗ 12 classes grow the vegetable garden.

luis farinha

✓ 12

Işıl ultav

✓ 12

Jakub-Poland

✗ 12 class

teste

✗ 24

Bahar kocabiçak

✓ 12

Szymon-poland

✗ 12 class

3. Write the correct option:

Bulgaria, Martin

✓ A

Zosia - Poland

✓ A

Bilgaria, Monika

✓ A

Maksymilian-Poland

✗ B

Lithuania Arnoldas

✓ A

WERONIKA-POLEN

✓ A

Portugal - Leonor

✓ A

Sara Hipólito

✓ A

BARROS1964

✓ A

Kinga- Poland

✓ a

Portugal-Maria

✓ A

Clara

✓ A

Lithuania, Dominika

✓ A

Lithuania Donatas Verbickas

✓ A

A $\frac{5}{2} < \frac{13}{4} < \frac{36}{10} < \frac{46}{9}$

B $\frac{13}{4} < \frac{46}{9} < \frac{36}{10} < \frac{5}{2}$

C $\frac{46}{9} < \frac{5}{2} < \frac{13}{4} < \frac{36}{10}$

B $\frac{5}{2} < \frac{46}{9} < \frac{36}{10} < \frac{13}{4}$

Nilsu karaburun

✓ A

Bartu özkan

✗ d

Bartu özkan

✓ a

Rui

✓ A

Utku aydoğan

✓ A

Bulgaria, Stanimir

✗ B

Bulgaria, Stanimir

✗ B

Nikodem-Poland

✓ A

Mustafa sefa Çiftli

✓ a

Bulgaria, Nazar

✓ A

Portugal-Inês

✓ A

Portugal-Afonso

✗ B

Portugal_AnaLuiza

✓ A

PORTUGAL-LIA

✓ A

Bulgaria

✓ A

Lithuania Ieva

✓ A

Portugal_Laura

✓ A

Nilsu

✓ A

Öykü özbucak

✓ a

Lithuania, Karina Butrimaite

✓ A

luis farinha

✓ A

Işıl ultav

✓ A

Jakub-Poland

✓ A

teste

✓ A

Bahar kocabiçak

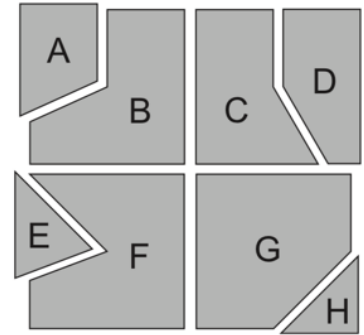
✓ A

Szymon-poland

✗ B

4. To make a puzzle, Rui split a square into eight polygons. Tick with X all the polygons that are pentagons.

- 6/53 (A) Polygon A
- 8/53 (B) Polygon B
- 22/53 (C) Polygon C
- 27/53 (D) Polygon D
- 2/53 (E) Polygon E
- 4/53 (F) Polygon F
- 26/53 (G) Polygon G
- 4/53 (H) Polygon H



5. How much is 5% of the 600.

Bulgaria, Martin

✓ 30

Zosia - Poland

✓ 30

Bilgaria, Monika

✓ 30

Maksymilian-Poland

✓ 30

Lithuania Arnoldas

✓ 30

WERONIKA-POLEN

✓ 30

Portugal - Leonor

✗ 300

Sara Hipólito

✓ 30

BARROS1964

✓ 30

Kinga- Poland

✓ 30

Portugal-Maria

✓ 30

Clara

✓ 30

Lithuania, Dominika

✓ 30

Lithuania Donatas Verbickas

✓ 30

Nilsu karaburun

✓ 30

Bartu özkan

✓ 30

Bartu özkan

✗ 1200

Rui

✓ 30

Utku aydoğan

✗ 1200

Bulgaria, Stanimir

✓ 30

Nikodem-Poland

✓ 30

Mustafa sefa Çiftli

✗ 1200

Bulgaria, Nazar

✓ 30

Portugal-Inês

✗ 12

Portugal-Afonso

✓ 30

Portugal_AnaLuiza

✗ 3

SZymon-Poland

✓ 30

PORTUGAL-LIA

✓ 30

Bulgaria

✓ 30

Lithuania Ieva

✓ 30

Portugal_Laura

✓ 30

Nilsu

✓ 30

Nilsu karaburun

✓ 30

Öykü özbucağ

✗ 1200

Lithuania, Karina Butrimaite

✓ 30

luis farinha

✗ 600*0,05

Işıl ultav

✗ 1200

Jakub-Poland

✓ 30

teste

✓ 30

Bahar kocabiçak

✗ 1200

Szymon-poland

✓ 30

6. What is the solution of the equation?

1/53 (A) 2

3/53 (B) 1

0/53 (C) 0

34/53 (D) -1

1/53 (E) -2

$$4x - 2 = 3(x - 1)$$

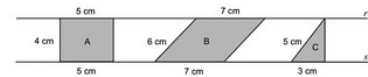
7. In the following figure, the straight lines r and s are parallel. Polygon A is a rectangle. The vertices of the polygons, A, B and C belong to the straight lines r and s . The area, in square centimeters of each of the polygons, A, B and C is:

3/53 (A) 18 cm^2 ; 26 cm^2 and 12 cm^2 .

2/53 (B) 20 cm^2 ; 49 cm^2 and 15 cm^2 .

32/53 (C) 20 cm^2 ; 28 cm^2 and 6 cm^2 .

1/53 (D) 20 cm^2 ; 42 cm^2 and 15 cm^2 .



8. The cathetus/ legs of a right angled triangle measure 8 cm and 6 cm. Determine the length of the hypotenuse of this triangle. Present the result in centimeters, rounded to the hundredths. Show all the calculations you have made.

Bulgaria, Martin

✓ 10

Zosia - Poland

✗ 66 to the power of $2 + 36$ to the power of $2 = c = 10$

Bulgaria, Monika

✓ 10

Maksymilian-Poland

✓ 10

Lithuania Arnoldas

✗ $c = 6^2 + 6^2 + 6^2 = 100$
 $c = 10$

WERONIKA-POLEN

✓ 10

Portugal - Leonor

✗ 14

Sara Hipólito

✓ 10

BARROS1964

✓ 10

Kinga- Poland

✓ 10

Portugal-Maria

✗ 100

Clara

✗ 10cm

Lithuania, Dominika

✗ $c^2=8^2+6^2=100$
 $c=10$

Lithuania Donatas Verbickas

✗ $c^2=6^2+8^2=100$
 $c=10$

Nilsu karaburun

6-8-10
60-80-100
✗ third numbers are answers

Bartu özkan

✓ 10

Rui

✗ 7

Utku aydoğan

✗ 140

Bulgaria, Stanimir

✓ 10

Nikodem-Poland

✗ 4cm

Mustafa sefa Çiftli

✗ 12

Bulgaria, Nazar

✓ 10

Portugal-Inês

✗ 10 cm

Portugal-Afonso

✓ 10

Portugal_AnaLuiza

✗ 10cm.

PORTUGAL-LIA

✗ 7

Bulgaria

✓ 10

Lithuania leva

✗ $c=6^2+8^2+6^2=100$
 $c=10$

Portugal_Laura

✗ 10cm

Nilsu

✓ 10

Öykü özbuçak

✓ 10

Lithuania, Karina Butrimaite

✗ $c^2=6^2+8^2=100$
 $c=10$

luis farinha

✓ 10

Işıl ultav

✓ 10

Jakub-Poland

✓ 10

teste

✓ 10

Bahar kocabiçak

✓ 10

Szymon-poland

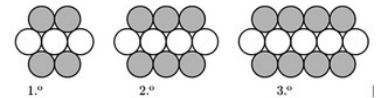
✓ 10

9. Two sides of a triangle are 9 cm and 16 cm long. Tick with X all the options that correspond to a possible length of the other side of the triangle.

- 4/53 (A) 4 cm
- 26/53 (B) 12 cm
- 24/53 (C) 20 cm
- 13/53 (D) 25 cm
- 10/53 (E) 30 cm

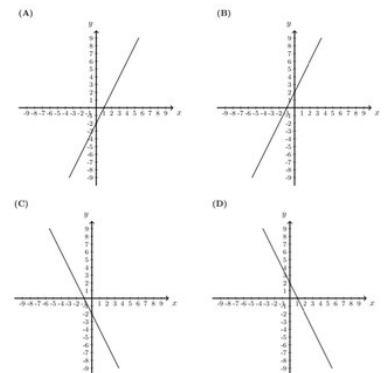
10. Here are represented the first three terms of a succession of figures made up of geometrically equal circles. With the exception of the first one, each term of the succession has one more white circle and two more grey circles than the previous term.

- 6/53 (A) $2n + 5$
- 7/53 (B) $5n + 2$
- 24/53 (C) $3n + 4$
- 2/53 (D) $4n + 3$



11. Which of the graphic representations below translate the function defined by $f(x) = 2x + 2$?

- 3/53 (A) Graphic A
- 25/53 (B) Graphic B
- 2/53 (C) Graphic C
- 8/53 (D) Graphic D



12. During the month of May, Rui did twenty temperature registers, in degrees Celsius, on his schoolyard. With the data obtained, Rui made the following table. What is the average temperature recorded?

Temperatura (em graus Celsius)	19	20	23	24	25
N.º de registos	4	3	3	3	7

- 0/53 A 20,6 °C
- 2/53 B 21,6 °C
- 31/53 C 22,6 °C
- 5/53 D 23,6 °C
- 1/53 E 24,6 °C

13. Calculate:

Bulgaria, Martin

✗ 27/10

Zosia - Poland

✗ $12/10 + 15/10 = 27/10 = 2 \frac{7}{10}$

Bilgaria, Monika

✓ 2,7

Maksymilian-Poland

✓ 2,7

Lithuania Arnoldas

✗ 27/10

WERONIKA-POLEN

✓ 2,7

Portugal - Leonor

✓ 2,7

Sara Hipólito

✗ 27/10

BARROS1964

✓ 2,7

Kinga- Poland

✗ $6/5 + 3/2 = 6 \setminus 5 * 2 = 12/10 + 3/2 * 5 = 15 \setminus 10 = 17/10$

Portugal-Maria

$$\frac{6}{5} + \frac{3}{2}$$

✓ 2,7

Clara

✓ 2,7

Lithuania, Dominika

✗ 27/10

Lithuania Donatas Verbickas

✗ You have to make in both sides the same denominators. So we get 12 and 15 and the same denominator is 10. The next step is you have to 12+15 so its gonna be. 27/10 or ~2,7

Nilsu karaburun

✗ 27/10

Bartu özkan

✓ 2,7

Rui

✗ 27/10

Utku aydoğan

✗ 2.7

Bulgaria, Stanimir

✗ 27/10

Nikodem-Poland

✗ 27/10

Mustafa sefa Çiftli

✓ 2,7

Bulgaria, Nazar

✓ 2,7

Portugal-Inês

✗ 27

Portugal-Afonso

✗ 2.7

Portugal_AnaLuiza

✗ 9/5

PORTUGAL-LIA

✓ 2,7

Bulgaria

✓ 2,7

Lithuania Ieva

✗ 27/10

Portugal_Laura

✓ 2,7

Nikodem-Poland

✗ 27/10

Nilsu

✓ 2,7

Öykü özbucağ

✓ 2,7

Lithuania, Karina Butrimaite

✓ 2,7

luis farinha

✗ 27/10

Işıl ultav

✓ 2,7

Jakub-Poland

✓ 2,7

teste

✗ 12723

Bahar kocabiçak

✓ 2,7

Szymon-poland

✓ 2,7