## The Mystery of the Missing Tennis Racket

At this year's prestigious world tennis championships, the players are all prepared to challenge for the famous trophy. However, at the last minute, one of the top players discovers that her favourite tennis racket has gone missing. Without her racket, there is no way that she can compete!

All of the other players spring into action and start searching for the missing equipment.

Can you solve the problems to see which helpful player discovers the whereabouts of the tennis racket?


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| Player | Gender | Continent | Age | Kit Colour | Tennis Skill |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Anna Avraham | Female | Asia | 24 | Red | Serve |
| Bailey Brown | Male | Europe | 22 | Green | Volley |
| Chow Chu | Female | Asia | 20 | White | Slice |
| Daniel Diaz | Male | South America | 21 | Blue | Speed |
| Elif Earl | Female | Australasia | 27 | Purple | Backhand |
| Felix Falade | Male | Africa | 31 | Black | Slice |
| George Gonzales | Male | North America | 35 | White | Serve |
| Harnam Hafeez | Female | Australasia | 25 | Green | Volley |
| India Ings | Female | Europe | 30 | Purple | Serve |
| Joshua Jelani | Male | Africa | 21 | White | Slice |
| Kuljeet Kimura | Female | Asia | 23 | Green | Volley |
| Li Lopez | Male | South America | 24 | Black | Speed |
| Matt Martin | Male | Australasia | 34 | Blue | Backhand |
| Nikita Naylor | Female | North America | 31 | Black | Slice |
| Odetta Otto | Female | Europe | 30 | Green | Serve |
| Preet Patel | Male | Asia | 20 | Purple | Volley |
| Queenie Quarrie | Female | Australasia | 19 | Blue | Backhand |
| Rehan Romero | Male | South America | 23 | White | Serve |
| Sophie Selassie | Female | Africa | 22 | Black | Speed |
| Thierry Toussaint | Male | Europe | 32 | Purple | Volley |
| Violet Vera | Female | North America | 27 | Blue | Speed |
| Wen Wu | Female | Asia | 24 | Black | Slice |

## Clue 1: Perimeter

Calculate the perimeter of each rectangle.
The solution that occurs the most will give a clue about who finds the tennis racket.


Perimeter $=$ $\qquad$


5 cm
Perimeter = $\qquad$


Perimeter $=$ $\qquad$ Perimeter $=$ $\qquad$


Perimeter = $\qquad$ Perimeter $=$ $\qquad$ Perimeter $=$ $\qquad$

| 16 cm | $\mathbf{1 8 c m}$ | $\mathbf{2 0 c m}$ |
| :---: | :---: | :---: |
| The player doesn't come <br> from Africa. | The player doesn't come from <br> Australasia. | The player doesn't come <br> from Asia. |

Clue: The player who finds the tennis racket doesn't come from $\qquad$ -

## Clue 2: Decimal Equivalents

Find a path through the maze by colouring in the equivalent measurements that are correct. You can only move vertically or horizontally.

The path will reveal a clue about the player who finds the tennis racket.

| $\text { STBOTH\}}$ | $5.1 \mathrm{~kg}=510 \mathrm{~g}$ | $3200 \mathrm{~m}=3.2 \mathrm{~km}$ | $12 \mathrm{~mm}=1.2 \mathrm{~cm}$ | $400 \mathrm{ml}=0.4 \mathrm{l}$ |
| :---: | :---: | :---: | :---: | :---: |
| $580 \mathrm{~m}=0.58 \mathrm{~km}$ | $3.4 \mathrm{l}=3400 \mathrm{ml}$ | $170 \mathrm{~cm}=1.7 \mathrm{~m}$ | $32 \mathrm{~cm}=3200 \mathrm{~mm}$ | $4.3 \mathrm{~kg}=4300 \mathrm{~g}$ |
| $450 \mathrm{~g}=0.405 \mathrm{~kg}$ | $34 \mathrm{~cm}=3.4 \mathrm{~mm}$ | $290 \mathrm{ml}=2.9 \mathrm{l}$ | $380 \mathrm{~m}=0.38 \mathrm{~km}$ | $23 \mathrm{~cm}=0.23 \mathrm{~m}$ |
| $430 \mathrm{~cm}=4.3 \mathrm{~m}$ | $12 \mathrm{~mm}=1.2 \mathrm{~cm}$ | $240 \mathrm{~m}=2.4 \mathrm{~km}$ | $7200 \mathrm{~g}=7.2 \mathrm{~kg}$ | $0.76 \mathrm{l}=76 \mathrm{ml}$ |
| $12 \mathrm{~km}=1200 \mathrm{~m}$ | $620 \mathrm{~g}=0.62 \mathrm{~kg}$ | $12 \mathrm{~m}=120 \mathrm{~cm}$ | $9.2 \mathrm{l}=9200 \mathrm{ml}$ | $59 \mathrm{~mm}=5.9 \mathrm{~cm}$ |
| $980 \mathrm{ml}=0.981$ | $870 \mathrm{~cm}=8.7 \mathrm{~m}$ | $730 \mathrm{~m}=0.73 \mathrm{~km}$ | $340 \mathrm{~mm}=3.4 \mathrm{~cm}$ | $10 \mathrm{~kg}=10000 \mathrm{~g}$ |
| The player's special skill is not a volley or serve. | The player's special skill is not a slice or backhand. | The player's special skill is not a backhand or speed. | The player's special skill is not speed or a volley. | The player's special skill is not a slice or serve. |

Clue: The tennis skill of the player who finds the racket isn't $\qquad$ .

## Clue 3: Triangles and Quadrilaterals

## Match each shape to its name.

The one remaining box will give you a clue about the player who finds the racket.


## parallelogram

The player's kit is green or black.

## equilateral triangle

The player's kit is green or blue.

## trapezium

The player's kit is white or black.

## square

The player's kit is green or purple.

## scalene triangle

The player's kit is blue or white.

## rectangle

The player's kit is purple or white.
right-angled triangle
The player's kit is blue or black.

## isosceles triangle

The player's kit is black or purple.

## rhombus

The player's kit is white or green.

Clue: The player who finds the racket has a $\qquad$ or $\qquad$ kit.

## Clue 4: Angles

Check if these statements about angles are true or false. If it is true, put a tick. If it is false, put a cross. Count the number of ticks and crosses.

If there are more ticks than crosses, the player who finds the racket is female.
If there are more crosses than ticks, the player who finds the racket is male.

(Circle the correct answer.)
Clue: The player who finds the tennis racket is a female/male.

## Clue 5: Coordinates Grid

Look at the coordinates grid.


In each row, colour the correct coordinates for each picture.
The column with the most correct answers will tell you about the age of the player who finds the racket.

|  | $(7,8)$ | $(7,9)$ | $(8,7)$ | $(8,8)$ |
| :---: | :---: | :---: | :---: | :---: |
|  | $(6,2)$ | $(1,6)$ | $(0,6)$ | $(6,1)$ |
|  | $(5,5)$ | $(4,6)$ | $(5,4)$ | $(4,5)$ |
|  | $(2,2)$ | $(3,6)$ | $(2,6)$ | $(6,3)$ |
|  | $19-22$ | $(3,1)$ | $(1,3)$ | $(4,2)$ |
|  | $23-26$ | $27-30$ | $31-35$ |  |

Clue: The player who finds the racket is aged
The player who was responsible for finding the racket is:

