Projecto Final P5JS 1º Semestre

Equipa no Github:

pf-cci-raquel_teresa

Respectivos membros:

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Link do formulário:

https://docs.google.com/forms/d/e/1FAIpQLSc3adYh_wFDJ9nUADZfnKzNVALhQC3fALZwdhF2b1YVhska-w/viewform?usp=sf_link

Link da interação:

https://eselx.github.io/pf-cci-raquel_teresa/

Tema do trabalho:

Elementos de Euclides

Referências:

Boneco de fala

```
function setup() {
  createCanvas(600, 900);
}

function draw() {
  background(220);

  //Balão de fala
  fill(250)
 rect(90, 20, 325, 55, 10, 10, 10, 1);

   //texto
  fill(87, 37, 144)
  textSize(20);
textAlign(LEFT);
text('Olá,o meu é Euclides! ', 100, 50);
```

```
 textAlign(LEFT);
text('Eu provei o Teorema de Pitagoras!', 100, 70);



 ///////////EUCLIDES
 //camisola
 fill(250, 30, 0)
 ellipse(50,90,40,50)
  //manta
 fill(230, 227, 14)
 ellipse(50,90,20,50)

 //cara
 fill(244, 226, 206)
ellipse(50,60,40)
 //barba
 fill(250)
 ellipse(50,80,20,30)
 //nariz
 fill(244, 226, 206)
 ellipse(50,64,10)
 //olho1
 fill(250)
 ellipse(40,60,10)
  fill(0)
 ellipse(40,60,3)
 //olho2
 fill(250)
 ellipse(60,60,10)
  fill(0)
 ellipse(60,60,3)
```

```
 //chapeu
 fill(0,0,266)
 ellipse(50,44,40,20)

 ///////////////INTERAÇÃO



}
```

Botão 1

```
 let button;
function setup() {
 createCanvas(400, 400);
 background(0);
 button = createButton('Botão da resposta!');
 button.position(49, 219);
 button.mousePressed(Resposta);
}

function Resposta() {
 let val = random(255);
 background(val);

  }
```

Botão 2

```
var a, b;

function setup() {

 // create canvas
 createCanvas(710, 700);
```

```
  background(220, 250, 255);
  //pergaminho




  fill(0)
textSize(22);
  text("E se...", 10, 370);

  a = createInput();
  a.position(130, 380);
  a.size(50);
  text("valor de a=", 20, 400);

  b = createInput();
  b.position(130, 410);
  b.size(50);
  text("valor de b=", 20, 430);

  button = createButton('Calcular c');
  button.size(210,30)
  button.position(20, 450);
  button.mousePressed(findc);


  //////////EUCLIDES


  ////////////////////////////////////////////////////////INTERAÇÃO
```

```
 ////////////////////////////////////Trianguloabc

}

function findc() {
 c = a.value() *a.value() + b.value()* b.value();

 textSize(32);
 text("O valor de c é igual a "+c , 260, 470);



 ///////////EUCLIDES

 ///////////EUCLIDES



}
```

Triângulo

```
function setup() {
 createCanvas(400, 400);
}

function draw() {
 background(220);
 strokeWeight(3);


  //A//
 stroke(63, 230, 14)
 line(30, 225, 185, 225);
```

```
  //B//
 stroke(230, 27, 14)
 line(30, 150, 30, 225);

 //C//
   stroke(14, 138, 230)
 line(30, 150, 185, 225);

}
```

PROPOSITION XLVII. THEOREM.

N a right angled triangle  *the ſquare on the hypotenuſe* —— *is equal to the ſum of the ſquares of the ſides,* (—— *and* ——).

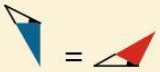
On —— , —— and —— deſcribe ſquares, (pr. 46.)

Draw ····· ‖ ····· (pr. 31.) alſo draw —— and —— .

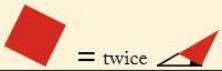
 ,

To each add  ∴  ,

—— = ····· and —— = ····· ;

∴  .

Again, becauſe —— ‖ ·····

 ,

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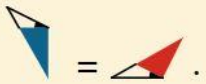
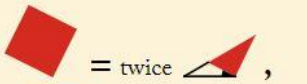
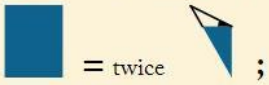
∴  .

Again, becauſe —— ‖ ·····

 ,

and  ;

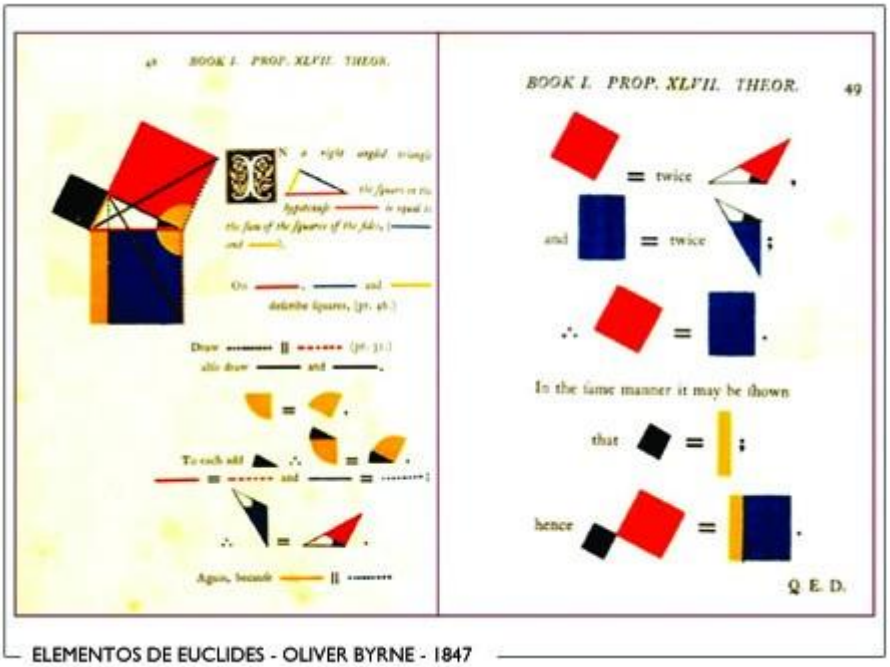
∴  .

In the ſame manner it may be ſhown

that  ;

hence  .

Q. E. D.



BOOK I. PROP. XLVII. THEOR. 49

= twice .

and = twice ;

∴ = .

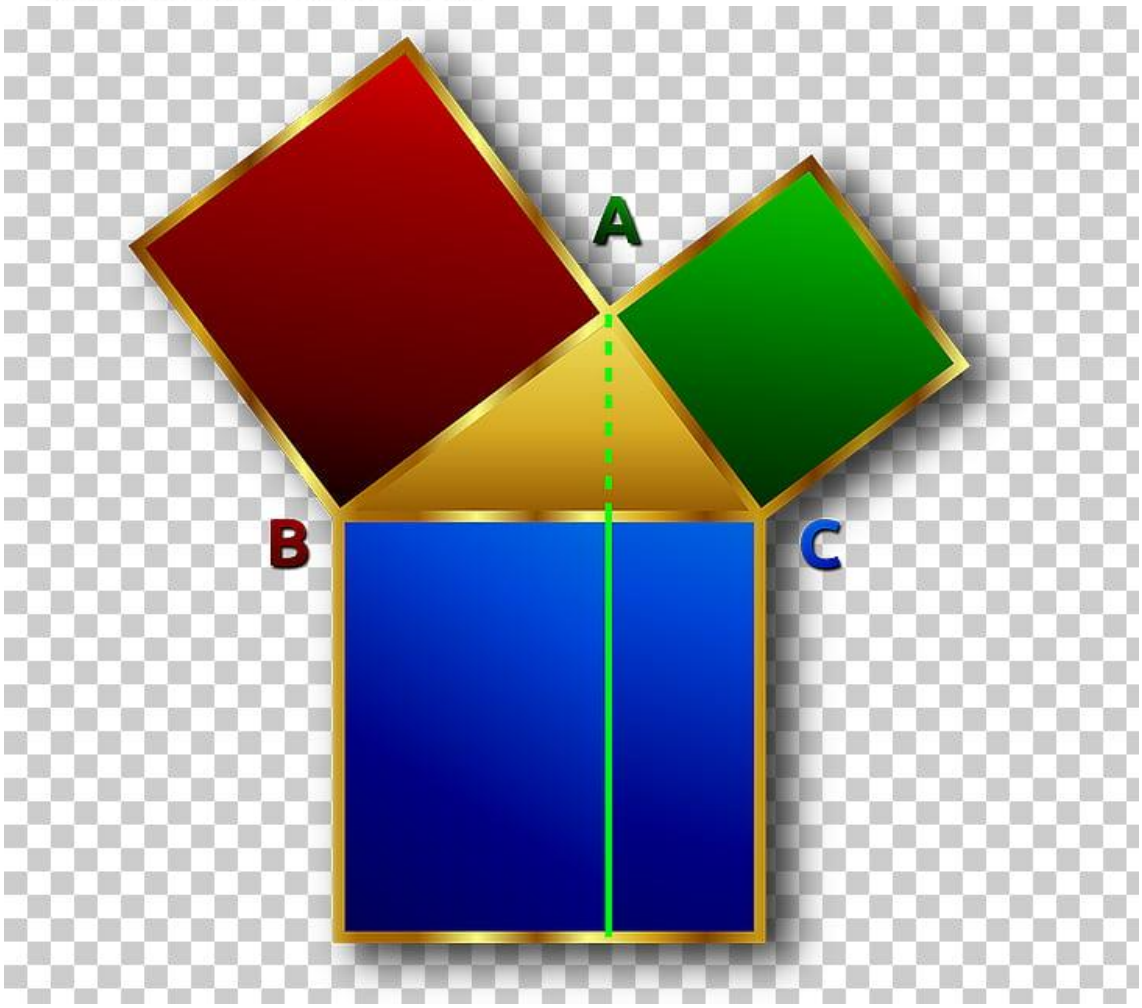
In the same manner it may be shown

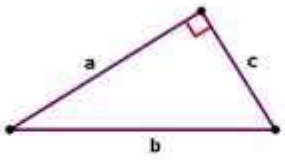
that = ;

hence = .

Q. E. D.

ELEMENTOS DE EUCLIDES - OLIVER BYRNE - 1847



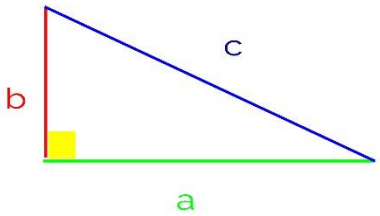


Practice:

If a = 6 and b = 8, c = ?

$b^2 = a^2 + c^2$ → $c^2 = b^2 - a^2$

$c^2 = 8^2 - 6^2 = 64 - 36 = 28$



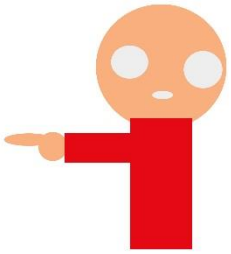
então $a^2 + b^2 = c^2$

E se....

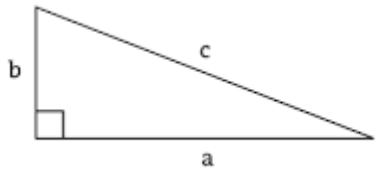
a=_____

b=_____

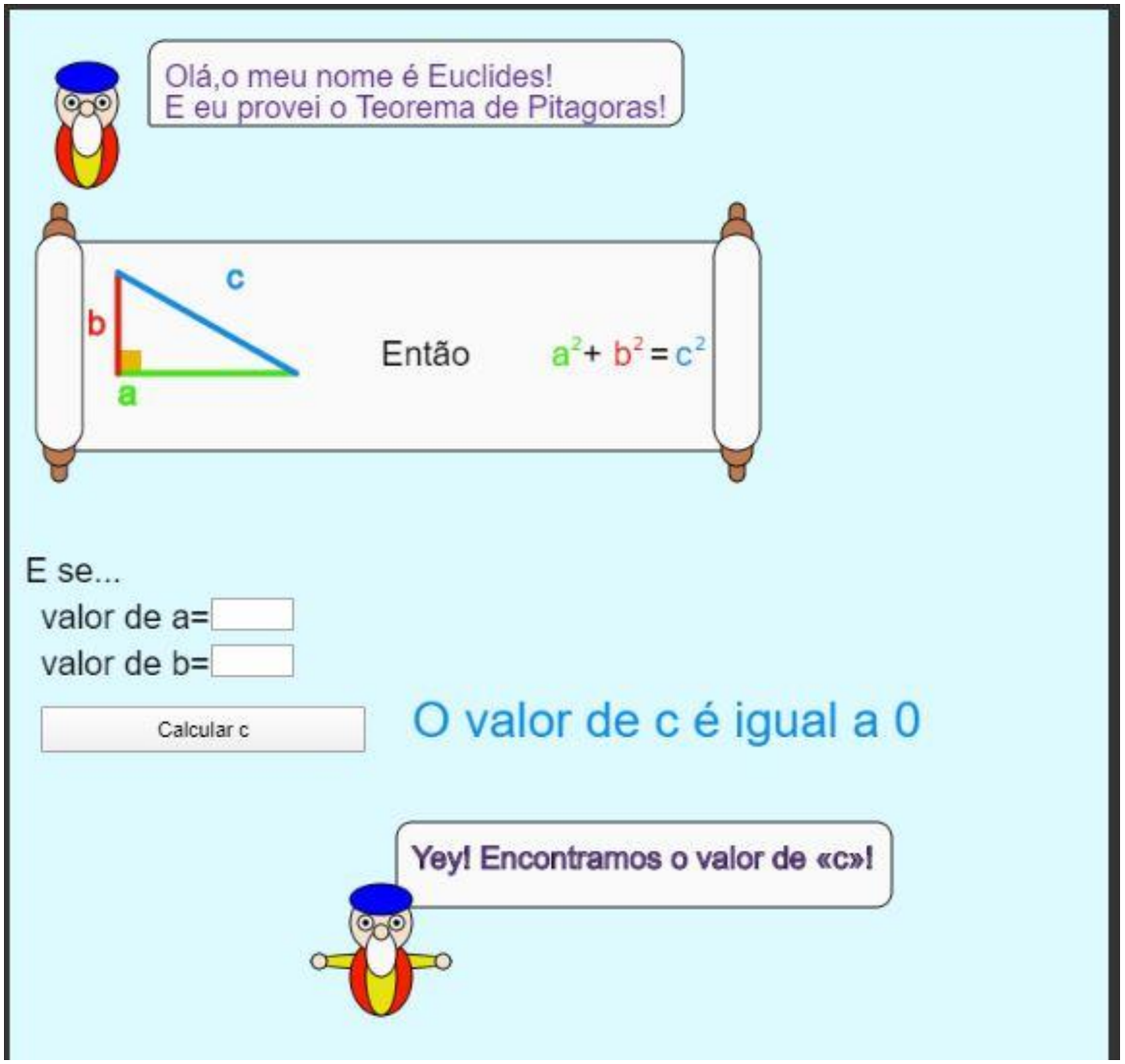
Botão da resposta!



Então c é igual a _____


b
c
a

$a^2 + b^2 = c^2$


Olá,o meu nome é Euclides!
E eu provei o Teorema de Pitagoras!
c
b
a
Então
$a^2 + b^2 = c^2$
E se...
valor de a=
valor de b=
Calcular c
O valor de c é igual a 0
Yey! Encontramos o valor de «c»!