Example Calculation Title

This can be a description of the calculation, and introduction to the author, or any other text.   [Author]

Inputs

The length of one side of the rectangle; $\qquad l_1 = 4 \text{ in}$

Area of a real life small rectangle; $\qquad A = 16 \text{ in}^2$

Color of the rectangle; $\qquad \text{color} = \text{Blue}$

Assumptions

[ASSUME] The rectangle in question is 2-dimensional planar

[ASSUME] Both side lengths are greater than 0

[ASSUME] This is a third important assumption

1. Calculations

Text blocks can add text anywhere you might need it.

1.1. Important Calculations

The length of the other side of the rectangle:

$$l_2 = \frac{A}{l_1} = \frac{16 \text{ in}^2}{4 \text{ in}}$$

$$\therefore l_2 = 4 \text{ in}$$

The length of the hypotenuse (rectangle diagonal):

[Pythagoras ~500BC]

$$h = \sqrt{(l_1)^2 + (l_2)^2} = \sqrt{(4 \text{ in})^2 + (4 \text{ in})^2}$$

$$\therefore h = 5.657 \text{ in}$$

1.2. Other Calculations

The area of a small imaginary square:

$$A_{square} = (l_1)^2 = (4 \text{ in})^2$$
$$\therefore A_{square} = 16 \text{ in}^2$$

2. Design Checks

What type of rectangle is it?:

$$Check\ l_1 \ = \ l_2$$
$$4 \text{ in} \ = \ 4 \text{ in}$$
$$\therefore Square$$

The hypotenuse should always be larger than the side:

$$Check\ h \ > \ l_2$$
$$5.657 \text{ in} \ > \ 4 \text{ in}$$
$$\therefore OK$$

I hope the square with side 1 is bigger than te rectangle:

$$Check\ A \ < \ A_{square}$$
$$16 \text{ in}^2 \ < \ 16 \text{ in}^2$$
$$\therefore ERROR$$

Other colors are cool too:

[Said Nobody]

$$\rightarrow color \ \neq \ Green$$

3. Placeholder for future section

3.1. A Sub-section

3.1.1. A sub-sub-section

3.1.2. Another sub-sub-section

3.2. Another sub-section