RATU NAVULA COLLEGE

MATHS YEAR 10

HOME STUDY KIT

WEEK 2

**GEOMETRY**

**LESSON 34**: PYTHAGORAS THEOREM I

Finding a SIDE, when two other sides given.

**Sub strand**: PYTHAGORAS THEOREM

Outcome: Finding hypotenuse side using Pythagoras theorem

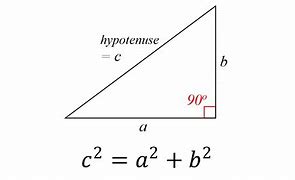
|  |  |
| --- | --- |
| Image result for Hypotenuse | Image result for pythagorean theorem examples with answers |

|  |
| --- |
| **Hypotenuse** |

In geometry, a hypotenuse is the longest side of a right-angled triangle, the side opposite the right angle. The length of the hypotenuse can be found using the Pythagorean theorem, which states that the square of the length of the hypotenuse equals the sum of the squares of the lengths of the …

**Note**: Please read the notes and examples given below

**NOTES**



**EXAMPLES**

|  |  |
| --- | --- |
| Find the value of C  Image result for pythagoras theorem formula | Find the value of C  Image result for pythagorean theorem examples with answers |

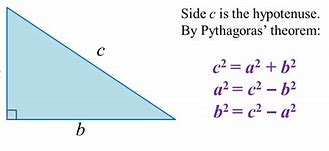
**EXERCISE**

|  |  |
| --- | --- |
|  | Find the value of in the following |

**LESSON 35**: PYTHAGORAS THEOREM II

**Sub strand**: PYTHAGORAS THEOREM

**Outcome:** Finding any of other two sides (a and b) using Pythagoras theorem



**Examples:**

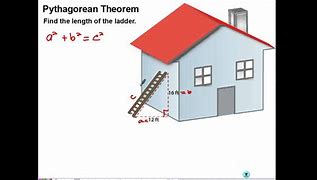
|  |  |
| --- | --- |
| Image result for pythagorean definition | How tall is the building?  Image result for Examples of Pythagorean Theorem Problems |
|  |  |
| Image result for Examples of Pythagorean Theorem Problems | Image result for Examples of Pythagorean Theorem Problems |

**EXERCISE**

|  |  |
| --- | --- |
| Find the length of **AB**  Image result for pythagoras exercise | **Find the length of AC**  **Image result for pythagoras exercise** |

**LESSON 36**:

**Sub strand**: APPLICATION OF PYTHAGORAS THEOREM



**Outcome:** Finding any side using Pythagoras theorem

**EXAMPLES**

|  |  |
| --- | --- |
| Image result for application of pythagoras theorem | Image result for Math Pythagorean Theorem |

**EXERCISE**

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| --- |
|  |

**LESSON 37**

**Sub strand**: Finding the unknown side of a Isosceles right angle triangle

**EXAMPLES**

|  |  |
| --- | --- |
| Find the value of the hypotenuse?  Image result for Isosceles Triangle Hypotenuse | SOLUTION |

**EXERCISE**

|  |  |
| --- | --- |
| Find the value of its hypotenuse?  Image result for isosccele rightangle triangle pythagorean theorem |  |

**WORKSHEET**

Find the length of the following unknown sides

|  |  |
| --- | --- |
| Find the length of BC  Image result for pythagoras exercise | Find the value of X  Image result for pythagoras exercise |
| Find the value of each x?  Image result for pythagoras exercise | Find the length of the hypotenuse?  Image result for pythagoras exercise |