



Description

- Apply knowledge of various concepts to solve a variety of problems in small groups to help consolidate learning.

Materials

- scientific calculator
- BLM 15.1

Assessment Opportunities

Minds On...

Whole Class → Brainstorm

Curriculum Expectations/Portfolio/Marking Scheme & Learning Skills/Observation/Checklist: Collect completed solutions for worksheet 14.1 and assess students' responses.

Individual → Reflection

Ask students to brainstorm all the different mathematical concepts they have learned during this term. Make a list on the board or chart paper. Each student sorts these concepts in the table provided in question 1 on BLM 15.1.

Curriculum Expectations/Anecdotal/Mental Note: Collect and read the students' work to determine which students need assistance.

Advise students that they will be revisiting concepts done previously through various activities and will be preparing for another assessment piece on the Pythagorean relationship.



Circulate as students are working to note which students may have had difficulty with the task.

Action!

Pairs → Conferencing

Randomly number students 1 and 2. They are to find a partner with a different number than themselves and share the practical problem they created. They discuss and check it to ensure that their solutions are correct. If a student had difficulty creating a problem, the partners could create one together.

Pairs → Problem Solving

Students work with another partner with whom to share their problem. Students solve their partner's problem and the partner checks the solution. Each student is responsible for assisting classmates by providing hints and explanations of the solution. Repeat the process with as many partners as the class period allows.

Take note of any especially interesting problems that students can share with the whole class.

Consolidate Debrief

Whole Group → Discussion

Invite comments about what students found out in trying to write, solve, and share the creation of problems that apply a particular mathematics relationship.

Individual → Self-Assessment

Learning Skills/Worksheet/Conference: Students complete questions 2 through 4 on BLM 15.1. Conference with students as they are working on their self-assessments and working through problems individually or in small groups.

Provide a series of practice questions from the textbook or supplementary resource(s) to help reinforce the skills.



Concept Practice

Home Activity or Further Classroom Consolidation

Complete the questions assigned from your textbook as a review of the Pythagorean relationship.

15.1: What Have I Learned?

Name:

Date:

1. Classify all the mathematical concepts and skills added to the class list into the following categories. This will help you to focus on concepts you had difficulty with when reviewing for future activities and assessments.

Do not yet understand thoroughly	Consolidating	Mastered

2. What do I need to review?

3. How will I improve my understanding of the concepts listed above?

4. Problems I can redo or practise to deepen my understanding.