Name: key
Date: _____

Mr. Johnson
Math 8

Lesson 1.7 – Applying the Pythagorean Theorem

Think it out….

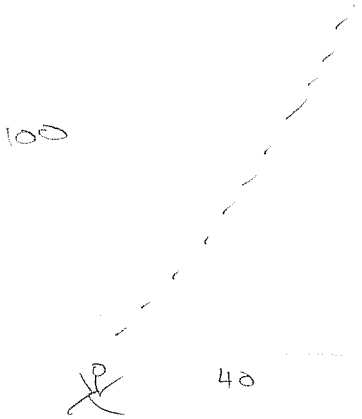
Can you think of a 'real life' application of the Pythagorean Theorem? Make up a problem that the class could possibly solve.

will vary among students

Example:

1. Mr. Johnson throws a baseball the length of 100 metre soccer field. Then he throws another baseball diagonally across the soccer field which has a width of 40 metres. What is the entire distance Mr. Johnson has thrown a baseball?

I suggest first draw a picture.



Throw # 1 = 100 m

Throw # 2: use Pythagorean Theorem

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

$(100)^2 + (40)^2 = c^2$

$10\,000 + 1600 = c^2$

$11\,600 = c^2$

$107.7\text{ m} \doteq c$

Total distance $\doteq$ 207.7 m

Assignment:

Pg. 48-51,

#'s 1-14, 16, 20, 21