

MATH 6: HOMEWORK 2
REVIEW OF MATH 5-2

To successfully cover new topics, we need to review some important concepts that you learned before in Math 5. Topics we reviewed today:

- Square root
- Types of triangles, congruent triangles
- Permutations, combinations, probability
- Pythagorean theorem

Write it neatly on quadrille paper with enough detail to understand your process.

Homework will be collected during the class.

The problems are similar to those we discussed today in class.

1. Find the following square roots without using calculator:

(a) $\sqrt{245}$

(b) $\sqrt{\frac{12}{49}}$

(c) $\sqrt{2^7 * 3^4}$

2. Solve this problems:

(a) There are 52 cards in the usual deck, in how many ways you can mix the cards?

(b) How many 3-letter combinations can be formed using 26 letters of Latin alphabet if no letter can be used more than once?

(c) Three dice are thrown one by one. What is the probability of obtaining three consecutive numbers in order?

3. Find the area of the figure below, if $a = 2$, $b = 2a$:

