Example of Notes and Homework

Students are expected to take organized notes on a daily basis. An example is shown below that displays one possible arrangement. Key things that should be listed are the date, daily warm up problem, definitions, examples, and in class experiments. All homework assignments should be started on a new sheet of paper and written on a separate sheet of paper from the notes.

Date: August 15, 2009 Section 1.0 Habits of Mind

Warm up

Warm up Question: A used car can be purchased for $12,000 cash or on credit with a $1000 down payment plus payments of $220 per month for 5 years. How much money would be saved by paying cash up front?

Total that will be spent: 1000 + 220(12)(5) = 14,200
14,200-12,000 =2,200 saved

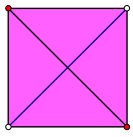
Notes

Definition—**Regular Polygon:** A closed figure with all sides equal in length and all angles equal in value

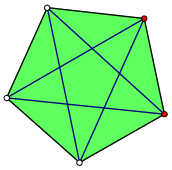
Definition—**Diagonal**: A segment that joins two non-adjacent vertices.

Example-- 2x + 12 = 16
2x = 4
x =2

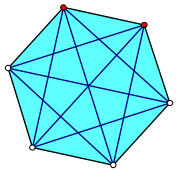
Experiment: Find an equation that lets you determine the number of diagonals in a polygon if you know the number of sides.



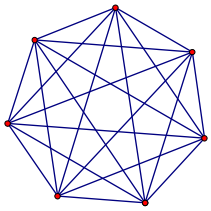
2 diagonals



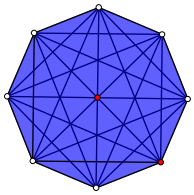
5 diagonals



9 diagonals



14 diagonals



20 diagonals

Sides	4	5	6	7	8
Diagonals	2	5	9	14	20

Patterns???

Diagonals go up by 3 then 4, then 5, then 6, etc……This pattern increases by one each time

Example of Notes and Homework

Diagonals = sides/2 wrong
Diagonals = sides(2) – 3 wrong

Homework August 15, 2009 Section 1.1 page 7 problems 11-17

11. What cross sectional shapes can you make by taking cross sections of a cube?

Triangle by slicing of a corner
Square by slicing off one complete side
Rectangle by slicing cube in half from opposite corners

12. Solve for

$$x^2 + 5x = -6$$
$$x^2 + 5x + 6 = 0$$
$$(x + 3)(x + 2) = 0$$

X = -2 or x = -3