Math 370.??, Homework 3
Latex: Mathematical Formulas
due Tuesday February 27. at the class time.

Instructions

1. Start with the Title (instead of ?? write the number of your section!):
   \title{MATH 370,??, Homework 2}
   \author{Your Name}
   \maketitle

2. The problem should start with "Problem #." and then there comes the solution. One should do it as "{\bf Problem 1.} ...".

3. The submitted homework should contain only the printout of the output.

4. The emphasis is on making your printout look the same as the homework text.

Problem 1. Please create the following formulas. Use the enumerate command to list them. Use the lists of mathematical symbols in chapter 4 of the book. Ask questions Tuesday.

1. $\dfrac{x^{4n}+y^{2x}}{y-z^{2m}}$

2. $\dfrac{\frac{1}{x+y}+\frac{1}{y}}{y-z}$

3. $\frac{1}{1-x} = \sum_{n=0}^{\infty} x^n$

4. $x^{3n+4p^{3a}} + x_{ij}$

5. $\sqrt{2+\frac{x}{y}}$

6. $\cos^2 x + \sin^2 x = 1$

7. $\cos 90° = 0$;

8. $\displaystyle\int_1^5 2x\,dx = 24$

9. $\int_a^b \cos(x)\,dx = \sin(x)$;   (be careful with the spacing!)

10. $\int_0^1 \int_0^1 x^2 y^2 \; dx\,dy$;   (notice the extra spacing!)

11. $\frac{\partial w}{\partial t}$;   (the symbol ∂ is typed: \partial).

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