

Math 20 - Thursday, 1/19

Welcome! Make namecards

Attendance / Creating our class together

Make class guidelines

Syllabus / D2L / Webwork / website

material : 1.6 + 1.9

2.1 + 2.2

Graded Assignment 1 and QUIZ 1 (take home)

due on Tuesday 1/24

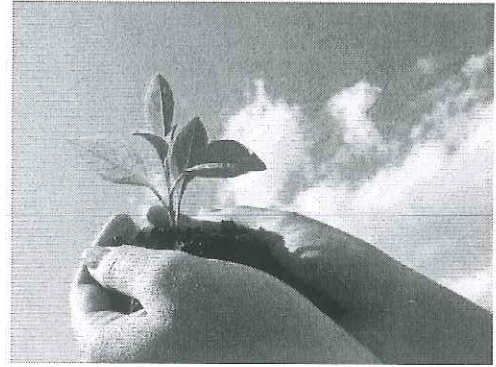
webwork 1.2 - 1.5, 1.7, 1.9 due Tuesday 1/24

Creating our class together

Introduce yourselves and discuss these two questions.

1. What are some characteristics of the environment in classes that you have enjoyed the most and learned the most in.

2. What are some characteristics of the environment in classes that you have enjoyed least and/or learned the least in.



Brainstorm some guidelines for our class and write them below. We will discuss and combine these into a single document.

Happy classroom

Respectful, respect for identities

Listening - one person talks at a time

Quiet

Fun!

Comfortable

BRIEF - keep things moving

Straightforward answers

Clear

on - topic

friendly

break down step-by-step - slow down pacing

real-world examples

group-work

working together

engaging

variety of activities

tips - shortcuts

step up / step back
- monitoring

cell phones - on silent
calls in the hall

Section 1.9 Order of operations

P	parentheses and grouping symbol	() []
E	exponents	{ }
M D	multiplication + division	→ in order from left to right
A S	add + subtract	from left to right
LR		

Examples

$$\begin{aligned} 1. \quad & 3 + \underline{4 \cdot 8} \\ & = 3 + 32 \\ & = 35 \end{aligned}$$

$$\begin{aligned} 2. \quad & \underline{48 \div 4} \cdot 3 \quad \text{Left to right} \\ & = 12 \cdot 3 \\ & = 36 \end{aligned}$$

formatting is important

$$\begin{aligned} 3. \quad & 4 \cdot \underline{2^2} - 11 \\ & = 4 \cdot 4 - 11 \\ & = 16 - 11 \\ & = 5 \end{aligned}$$

$$2^2 = 2 \cdot 2 = 4$$

$$2^3 = 2 \cdot 2 \cdot 2 = 8$$

$$\begin{aligned}
 4. \quad & 33 + 6(56 - 9 \cdot 6) \\
 & = 33 + 6(56 - 54) \\
 & = 33 + 6 \cdot (2) \\
 & = 33 + 12 \\
 & = 45
 \end{aligned}$$

$$33 + 6 \cdot 2$$

$$\begin{aligned}
 5. \quad & 81 + 3[8^2 - 7(13 - 5)] \\
 & = 81 + 3[8^2 - 7(8)] \\
 & = 81 + 3[64 - 56] \\
 & = 81 + 3[8] \\
 & = 81 + 24 \\
 & = 105
 \end{aligned}$$

$$8^2 = 8 \cdot 8 = 64$$

$$\begin{array}{r}
 81 \\
 + 24 \\
 \hline
 105
 \end{array}$$

$$6. \quad \frac{(6(31) - 26)}{(4 \cdot 2^3)}$$

division is last

$$= \frac{186 - 26}{4 \cdot 8}$$

$$\begin{array}{r}
 31 \\
 \times 6 \\
 \hline
 186
 \end{array}$$

$$= \frac{160}{32}$$

$$2 \cdot 2 \cdot 2 = 8$$

$$= 5$$

$$\begin{array}{r}
 5 \\
 32 \overline{) 160} \\
 \underline{-160} \\
 0
 \end{array}$$

$$\begin{array}{r}
 5 \\
 32 \\
 \times 5 \\
 \hline
 160
 \end{array}$$