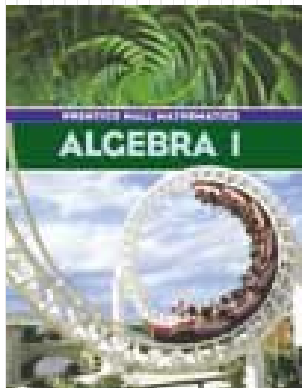


Mr. Northcutt's Math Classes Class Presentation

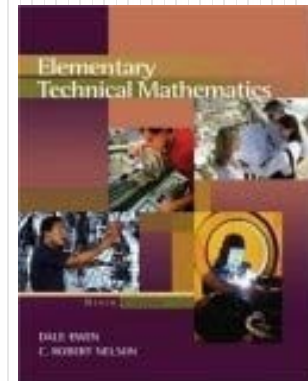
February 4, 2009 (96)



Math 1



Math 2



Applied Math



Math 1 – Daily Summary

- **Announcements**
 - None
- **Class Objectives – *What you should learn today!***
 - Review of Quiz Results - Focus on Missed Problems
 - Defining a Function Rule from a Relation.
- **Assignment**
 - **Section 5-4: 1-3, 4-18 EVEN**



Quiz Results

- **Scoring Summary** (out of 19 points)
 - High = 19 (100%)
 - Low = 7 (40%)
 - Average = 14.5 (76%)
- **Most Missed Problems**
 - {...} on all sets; Fail to order from low-to-high, duplicates.
 - **#6** (Graph): Failed to provide Title and Labels, wrong graph.
 - **#11 & #12**: To few data points; include negatives and add numbers to list if pattern not clear



Writing a Function Rule

- **Defining a Function Rule from a tables of values...**
 - Examine values; Guess and check; Repeat until confirmed.

x	h(x)
1	-1
2	0
3	1
4	2

x	h(x)
1	2
2	4
3	6
4	8

x	h(x)
1	3
2	4
3	5
4	6

Writing Function Rules (from Words)



- The total **distance $d(h)$** traveled after **h hours** at a **constant speed of 45 mph** .
 - What are the INDEPENDENT and DEPENDENT variables?
 - What distance would be travelled after 5 hours?

- A worker's **earnings $e(h)$** for **h hours** when the worker's **hourly wage is $\$6.37$** .
 - What are the INDEPENDENT and DEPENDENT variables?
 - What distance would be travelled after 5 hours?



Math 2 – Daily Summary

- **Announcements**
 - None
- **Class Objectives – *What you should learn today!***
 - Review of Quiz Results - Focus on Missed Problems
 - Calculate the Area of a Circle
- **Assignment**
 - **Lesson 9.5:** 1-10, 12-14, 16



Quiz Results

- **Scoring Summary** (out of 28 points)
 - High = 22 (79%)
 - Low = 8 (29%)
 - Average = 14.5 (76%)
- **Most Missed Problems**
 - **#1-4:** Failed to draw picture; wrong label for “h”
 - **#5:** Failed to multiply by $\frac{1}{2}$.
 - **#6-9:** Varied problems. (**Work in Class!**)

Area of a Circle - How?

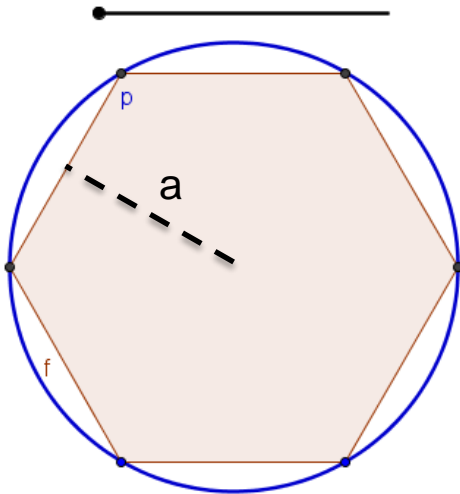


What happens to a and p as the number of sides s gets very large?

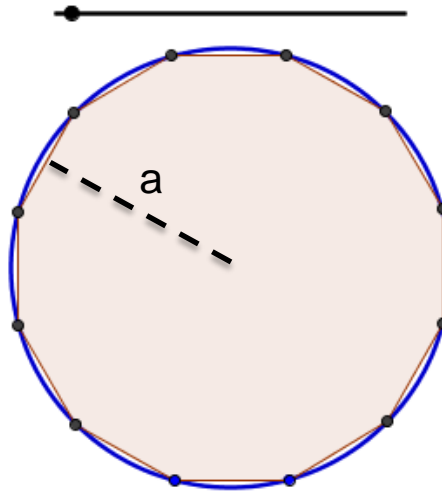
- Area of a Regular Polygon

$$A = \frac{1}{2}(a \cdot s) \cdot n = \frac{1}{2}a \cdot (s \cdot n) = \frac{1}{2}a \cdot p$$

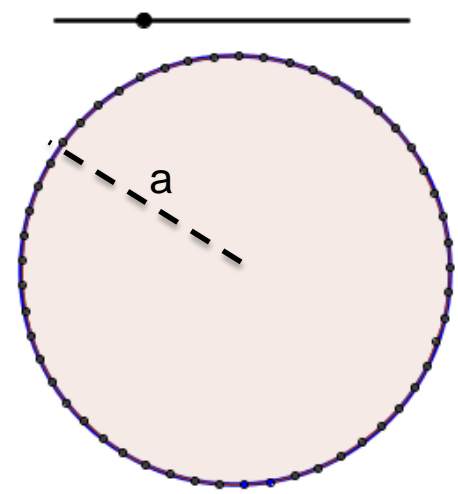
Sides = 6



Sides = 12



Sides = 53





Area of a Circle

- **Area of a Circle**

- Area is given by the formula:

$$A = \pi r^2$$

Where **A** is the area and **r** is the radius of the circle.



Applied Math – Daily Summary

- **Announcements**

- **Quiz on Sections 4.1 thru 4.6 on Friday!**
- *Last day to hand in Project is Friday.*

- **Class Objectives – *What you should learn today!***

- Confirm understanding of significant digits, precision and greatest possible error.
- Adding and Subtracting: Precision vs. Accuracy

- **Assignment**

- **Section 4.5:** 3, 7, 11, 14, 23, 28, 31, 37, 47-50
- Finish Geometric Art (*-2 points each day late past 2/2*)



Precision vs. Accuracy

- **Precision** (*unit of measure*)
 - Position of the least significant digit (2.34 cm → 0.01cm)
- **Accuracy** (*# of significant digits*)
 - The number of significant digits (2.34 cm → 3 sig. digits)
- **Find the measurement that is:**
 - Least Precise, Most Precise, Least Accurate, Most Accurate

Measurement	Precision	Accuracy
13.00 m		
0.140 m		
3400 m		
0.006 m		

Adding & Subtracting Measurements



- The sum or difference of two measurement can be **NO more precise than the least precise measurement.**
- **Steps for adding or subtracting:**
 - Put all measurements in the same units.
 - Add or subtract.
 - Round result to precision of least precise measurement.

$$\begin{array}{r} 13.8 \text{ m} \\ 1.853 \text{ m} \\ + 140.2 \text{ cm} \\ \hline \end{array}$$

$$\begin{array}{r} 41.7 \text{ m} \\ -19.352 \text{ cm} \\ \hline \end{array}$$