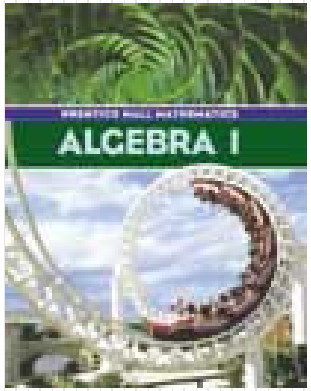
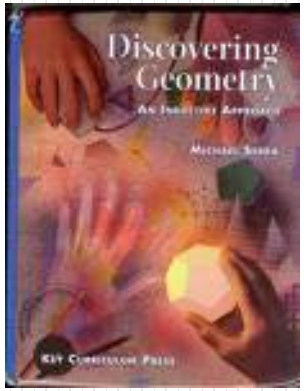
Mr. Northcutt's Math Classes
Class Presentation

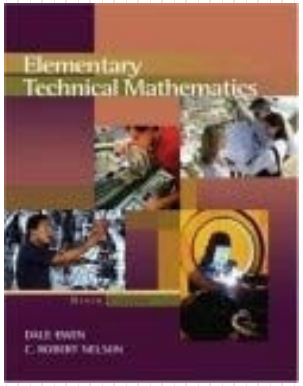
Wednesday, October 15, 2008 (31)



Math 1



Math 2



Applied Math

Math 1 – Daily Summary

- **Announcements**
  - No School Thursday or Friday…Enjoy the break!
- **Class Objectives**
  - Problem Solving with Equations
    - Distance, Rate and Time
- **Assignment**
  - **Lesson 2-5**: 10-15, 21-27

HW Solutions – Section 2.5 (1)

1: 9 in

2: 2 in by 10 in

3: 9 cm by 18 cm

4: 5 yd by 13 yd

5: C

6: 58, 60

7: 27, 29

8: 304, 305, 306

9: -148, -150

18: 74, 76, 78, 80

19: -27, -28, -31

20: 10 5/6 ft or 10 ft 10 in

31: 41, 42, 43

Distance-Rate-Time Problems

- **The relationship between distance-rate-time is:**

$$r \cdot t = d$$

- **2 VOLUNTEERS with time displayed on the whiteboard:**
  - 1st: Start at 0, take 1 step every 5 seconds
  - 2nd: Start at 20, take 2 steps every 5 seconds

- **What are the rates of the two students (steps/second)?**
- **When will the 2nd student overtake the 1st student?**

Same-Direction Travel

- **One train leaves a station at 1pm travelling at 60 mph. A second high-speed train leaves the same station an hour later travelling at 96 mph. The second train is on a parallel track to the first train. In how many hours will the second train catch up with the first train?**
  - **Hint:** Let **t** represent the time the 1st train travels.

Train	Rate	×	Time	=	Distance
1	60 mph				
2	96 mph				

$$r \cdot t = d$$

When Train 2 catches up with Train 1 what is true about the distance the trains have travelled?

Round-Trip Travel

- **Gavin drives to the city to buy software at a computer store. Due to traffic going to the city he averages only 15 mph. While driving home, he averages 35 mph. If the total travel time is 2 hours, how long did it take him to drive to the store?**
  - **Hint:** Let **t** represent the time for Gavin to drive to the store.

To/From	Rate	×	Time	=	Distance
To Store	15 mph				
From Store	35 mph				

How can we represent the time to drive from store to home in terms of the variable **t**?

$$r \cdot t = d$$

Opposite Direction Travel

- **Alonna and Tori leave their home traveling in opposite directions on a straight road. Tori drives 15 mph faster than Alonna. After 3 hours, they are 225 miles apart. <u>Find Alonna and Tori's rate (speed)</u>?**
  - **Hint:** Let **r** represent Alonna's rate (speed).

To/From	Rate	×	Time	=	Distance
Alonna			3		
Tori			3		

How can we represent Tori's rate in terms of **r**?

$$r \cdot t = d$$

Math 2 – Daily Summary

- **Announcements**
  - No School Thursday or Friday…Enjoy the break!
- **Class Objectives**
  - Lesson 4.3 HW Answer Check
  - Quiz: Lesson 4.1 – 4.3
  - After Completing Quiz:
    - HW Check
    - HW Catch-up
    - Computers: If ALL HW Complete
- **Assignment**
  - No HW

HW Solutions – Lesson 4.3

1: Neg., Undef., Pos., 0

3: (-9, 1.5)

5: (-6, 44)

7: Any point (3x, -4x)

9: No. Same order x & y

11: y = (2/3)x + 6

13: -5/2

15: 3/2

17: 1/7

19: Undefined

21: 1

23: -12/13

25: (y-3)/2

27: 0, 1, 0, 8/3

29: 2/3, 0, 3, (9,6), (16,6), (7,0), 3, 2/3, 0

31: 66 2/3 mph

33: 6 mph, 4:35, 36 mph, 15 min then 20 min

35: 57^o, 123^o

38: 45^o, yes, yes, yes

39: 0, snow

Applied Math – Daily Summary

- **Announcements**
  - No School Thursday or Friday…Enjoy the break!
- **Class Objectives**
  - Chapter 3 Retest (Metric System)
- **Assignment**
  - No HW