

# Math 20 - Tuesday 8/5

Jokes

warm-up problems / Homework check-ins

Q's on 5.2, 5.3, 5.4

New material: 6.1, 6.2, 6.3 percents

Mission 3 handed out today - due next Tuesday

Bonus 2 due Thurs (show examples)

Test corrections due Thurs

Checkpoint 5 on Thursday - study chap 5 and 6

Withdraw deadline for 8-week classes: Wed Aug 6  
(or change grade option)

Registration Starting for Fall

MW  
9-11:20

math 

60	65	← faster pace
61	62	63 ← slower pace

ALC 60A - 0 credits

60B - 1 credit 3 hrs/week

60C - 2 credits 6 hrs/week

60D - 3 credits 9 hrs/week

M-F  
Carl/Yao → 9-noon

Cara → 1-4 pm  
evening

Q's on 5.2

59.

$$\frac{x}{2.5} = \frac{3.7}{9.25}$$

$$\frac{9.25x}{9.25} = \frac{9.25 \cdot 3.7}{9.25}$$

$$x = 1$$

61.

$$\frac{0.8}{2} = \frac{x}{5}$$

cross-multiply

$$2x = \frac{4}{2}$$

$$x = 2$$

5.3



feet

43. 105 yards to miles

$$\frac{105 \text{ yards}}{1} \cdot \frac{3 \cancel{\text{ feet}}}{1 \cancel{\text{ yard}}} \cdot \frac{1 \text{ mile}}{5280 \cancel{\text{ feet}}}$$

yards to feet  
feet to miles

$$= \frac{105 \cdot 3}{5280}$$

$$= \frac{315}{5280}$$

61  
43  
101

31  
43  
101  
57  
55

$$\frac{105 \text{ yards}}{1} \cdot \frac{3 \text{ ft}}{1 \text{ yard}} \cdot \frac{1 \text{ mile}}{5280 \text{ ft}}$$

$$= .05965$$

$$\approx .06 \text{ miles}$$

55. 8 pints to fl. oz.

$$2 \text{ c.} = 1 \text{ pt}$$

$$8 \text{ oz} = 1 \text{ cup}$$

$$\frac{8 \text{ pts}}{1} \cdot \frac{2 \text{ cups}}{1 \text{ pts}} \cdot \frac{8 \text{ oz}}{1 \text{ cups}}$$

$$= 128 \text{ fl. oz.}$$

57. 21 pts to fl. oz

$$\frac{21 \text{ pts}}{1} \cdot \frac{2 \text{ cups}}{1 \text{ pt}} \cdot \frac{8 \text{ oz}}{1 \text{ cup}}$$

$$= 336 \text{ fl. oz}$$

101. 35 miles  $\rightarrow$  yards

$$\frac{35 \text{ miles}}{1} \cdot \frac{5280 \text{ ft}}{1 \text{ mile}}$$

$$\frac{184,800 \text{ ft}}{1} \cdot \frac{1 \text{ yard}}{3 \text{ ft}}$$

$$= 61,600 \text{ yards}$$

$$616 \text{ football fields}$$

## 5.4 metric

25. 10 equal parts called millimeters mm

39 27. 156 mm  $\approx 155$

41  
53 29.

27 39. 4.5 cm to km

4.5  
five decimal places  
to the left

~~4.5~~  
4.5  
.000045 km  
~~0.0045~~

41. 0.3 cm to km  $\leftarrow 5$

.000003 km

53. ~~0.3 decimeters to cm~~

~~3 l to ml~~

3.0

26.3 l to ml

26.300 = 26,300 ml

2:44



# Chapter 6 - Percents

grocery store 25% off  
50% off  
30%

taxes - sales tax

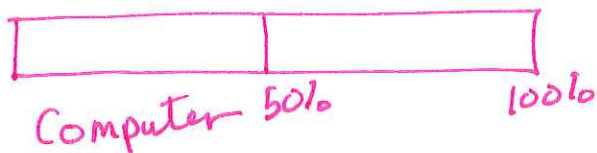
6.5% Minnesota

Texas 9%

Alaska 10.2%

weather - 50% chance of ~~rain~~  
sun

Stock market ↓ 10%



School 50% of students are freshmen

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Section math class

6.1

test 1

$$\frac{56}{65}$$

$$56 \div 65$$

$$0.86$$

$$86\% \text{ or } \frac{86}{100}$$

test 2

$$\frac{28}{35}$$

$$28 \div 35$$

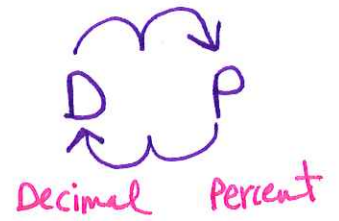
$$0.80$$

$$80\% \text{ or } \frac{80}{100}$$

Percent  
100  
per 100

<u>Decimals</u>	
1.0	1 whole
.5	
.25	
.10	
2.00	
10.0	
.07	

<u>Percents</u>
100%
50%
25%
10%
200%
1000%
7%



ex: ~~28.0~~ %  
 18. 31%  
 $\frac{31}{100}$  per 100

write as a fraction

22. 5%  
 $= \frac{5 \div 5}{100 \div 5}$   
 $= \frac{1}{20}$

28. 97.1% per 100  
 $\frac{97.1}{100} = \frac{971}{1000}$

.05%  
 $\frac{.05}{100} = \frac{5}{10,000} = \frac{1}{2,000}$



50. 27.21%  
 .2721

write as a decimal

$$56. \underline{0.86}\%$$

$$.086 \quad \swarrow .75$$

$$58. \quad 9\frac{3}{4}\% \quad \text{as a decimal}$$

$$\underline{0.975}\%$$

$$.0975$$

D P

$$70. \quad 0.\underline{245} \quad \text{write as a percent}$$
$$24.5\%$$

$$76. \quad \underline{9.00}$$
$$900\%$$

~~88~~

$$82. \quad \frac{3}{8} \quad \text{write as a percent}$$

$$3 \div 8$$

$$= \underline{.375}$$

$$37.5\%$$

$$\begin{array}{r} .375 \\ 8 \overline{) 3.000} \\ \underline{-24} \phantom{00} \\ 60 \\ \underline{-56} \\ 40 \end{array}$$

D P

~~Section~~