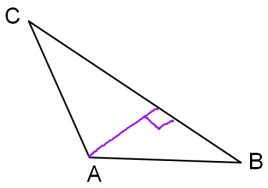
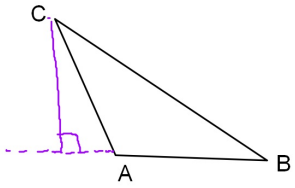
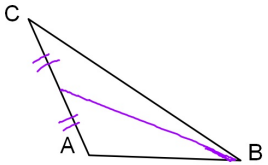
Draw the Altitude from A. Show using symbols that this line is the altitude.



Draw the Altitude from C. Show using symbols that this line is the altitude.



Draw the Median from B. Show using symbols that this line is the Median.



Hwk #3

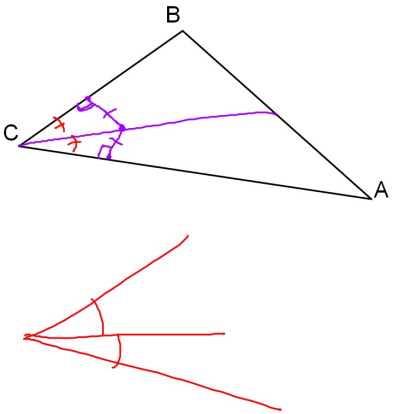
Sec 5-5

Pages 293-294

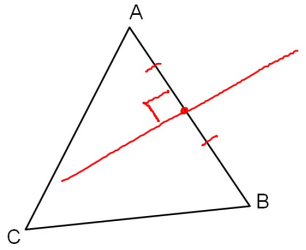
Problems: 4, 8, 10, 13, 16, 17, 25, 26, 37

Due Friday

Draw the Angle Bisector for C. Show using symbols that this line is the angle bisector.



Draw the Perpendicular Bisector of AB. Show using symbols that this line is the perpendicular bisector.



Ratio: A comparison of two quantities

Three ways to write a ratio:

a to b a : b $\frac{a}{b}$

Proportion: A mathematical statement showing two ratios are equal

Use this proportion to complete each statement.

$$\frac{22}{13} = \frac{33}{a}$$

1. $\square = \frac{33}{22}$

2. $\frac{a}{33} = \square$

3. $\frac{35}{13} = \square$

4. $429 = \square$

Solve. $\frac{48}{x} = 72$

Solve.

$$\frac{3}{m+7} = \frac{8}{m-2}$$

Solve for x and y.

$$\frac{y}{42} = \frac{35}{16} = \frac{95}{x}$$

Scale Drawing:
A drawing of an actual object that is similar
but either larger than the actual object (enlargement)
or smaller than the actual object (reduction)

Scale: the scale on a drawing is a ratio

$$\text{Scale} = \frac{\text{Drawing measure}}{\text{Actual measure}}$$

The scale on a drawing of an insect is 18:5. $\frac{18}{5}$

1. The insect is actually 2.2 cm long. How long is the insect in the drawing?

$\frac{a}{18} = \frac{5}{a}$ $\frac{2.2}{x} = \frac{5}{a}$ $5x = 39.6$ $\frac{5x}{5} = \frac{39.6}{5}$ $x = 7.92$

2. In the drawing the wingspan of the insect is 6cm. What is the actual wingspan?

$\frac{18}{5} = \frac{6}{x}$ 1.6

You want to make a scale drawing
of the floorplan of a house.

The house is actually 40ft x 32ft

You have a piece of paper that is 9" x 12"

32ft : 9in

1in = 3.5 ft

What scale would you use to make the largest scale drawing of the house possible?

$\frac{40\text{ ft}}{12\text{ in}} = \frac{32\text{ ft}}{?}$ this won't fit 9.6in

$\frac{32\text{ft}}{9\text{in}} = \frac{40\text{ft}}{?}$ 11.25in this will fit.

Hwk #4: Sec 7-1

Due Monday

Pages 366-368

Problems: 3 - 5, 7, 15, 18, 46

Students at the University of Minnesota built a model globe 42 feet in diamter using a scale of 1:1,000,000.

About how tall is Mount Everest on the model?
(Mt. Everest is about 29,000 feet tall)

$$\frac{1}{1{,}000{,}000} = \frac{X \text{ ft}}{29{,}000 \text{ ft}}$$

6 ft

$.029 \text{ ft} = .348 \text{ in}$