

1. Go over problems from quiz.

Topic F. Angles and Construction of Diagrams (not included on Test 1)

**Preliminary skills:** Check off these that you have learned about.

1. Choose an appropriate scale factor, make a drawing, and label the drawing with both the measurements and the values they represent in the real world. Give the scale factor somewhere on the diagram.  
**Exercise:** A circular irrigation system is planned. The radius will be 75 feet. Use your compass to draw a careful diagram and label it with your scale factor, your measurement, and the real-world measurement.
2. Given an already-constructed diagram and a real-world measurement on it, find the scale factor. Then measure another length on the diagram and find the corresponding real-world length. (Practice with the page of circles, page 3.)
3. Use your protractor to measure angles, including angles larger than  $90^\circ$ . (Practice with the page of arrows, page 4.)
4. Learn two methods of writing bearing. (See Topic F for description of those ways.) (Practice with the page of arrows, page 4. Write bearings in both methods.)
5. Identify a strategy for drawing parallel lines that are precisely parallel, not just approximately parallel. (Graph paper is helpful.)
6. Identify a strategy for drawing right angles quickly and easily. (Maybe graph paper, maybe the right triangles in your kit, maybe your protractor.)
7. Recall the fact concerning the angles from two parallel lines cut by another straight line. (Identify and measure corresponding angles on the page with the diagram of a ship's path.. Practice on page 5 here.)
8. Solve a word problem by making a careful diagram with an appropriate scale factor and then measuring, and converting your measurement, to answer the question in the problem. (Solve the problem about the ships on another page here.)
9. Do Topic I, Example 7. (Use graph paper.)
10. Discuss angles of elevation and angles of depression. (Both are angles from the horizontal.) Review Example 5 and Example 8.

**We will work on constructing diagrams at various times throughout the course and testing on it will be incorporated with testing on other topics.**

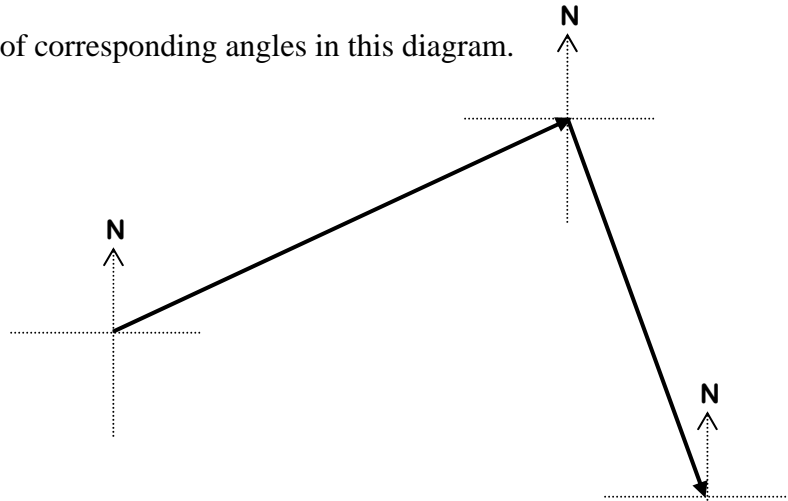
**Homework:**

Topic F: Part I. 8, 9, 10, 11, 12, 18, 19 OR Part II. 23, 25, 27, 29, 31, 37

**Quiz problems for next class:**

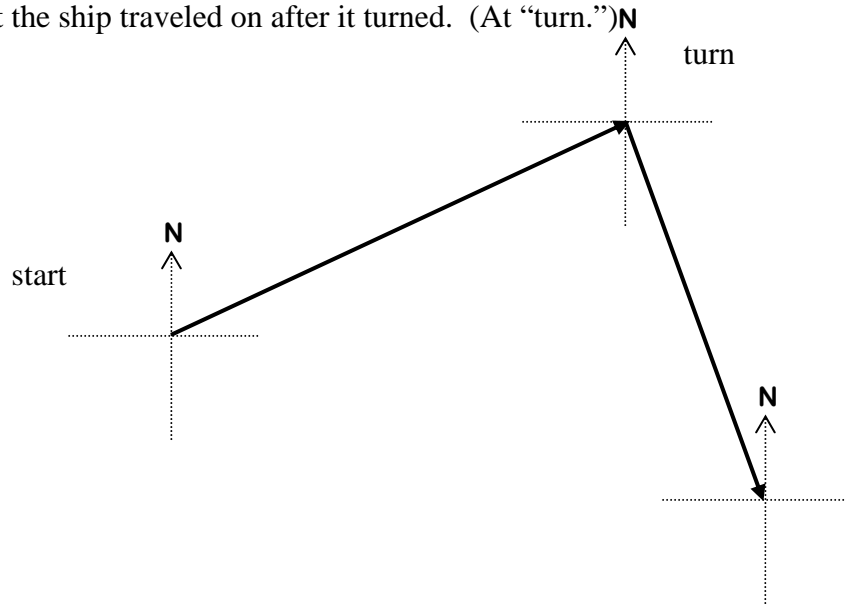
1. Use a careful diagram to find the length of the altitude to the longest side of a triangle whose sides are 12 ft, 17 ft, and 24 ft.
2. Topic F. problem 26.
3. Topic F. problem 28.
4. Topic H. 11
5. Topic I. 17

1. Identify one pair of corresponding angles (which have the same measurement) in this diagram. Measure and see that you do find the same measurement.
2. Identify a second pair of corresponding angles in this diagram.



The diagram represents the path of a ship which starts, travels in a straight line for a certain distance, then turns to take a different direction and travels in a straight line for some distance.

1. Write the bearing that the ship originally traveled on. (At “start.”)
2. Write the bearing that the ship traveled on after it turned. (At “turn.”)



3. If the ship traveled 90 miles from the start to where it turned, find the scale factor for this diagram, in terms of miles and centimeters.
4. Draw the line from where the ship started to where it ended. How many miles was this? (Measure and then use your scale factor to get the answer.)

