

Names _____

1	2	3	Total

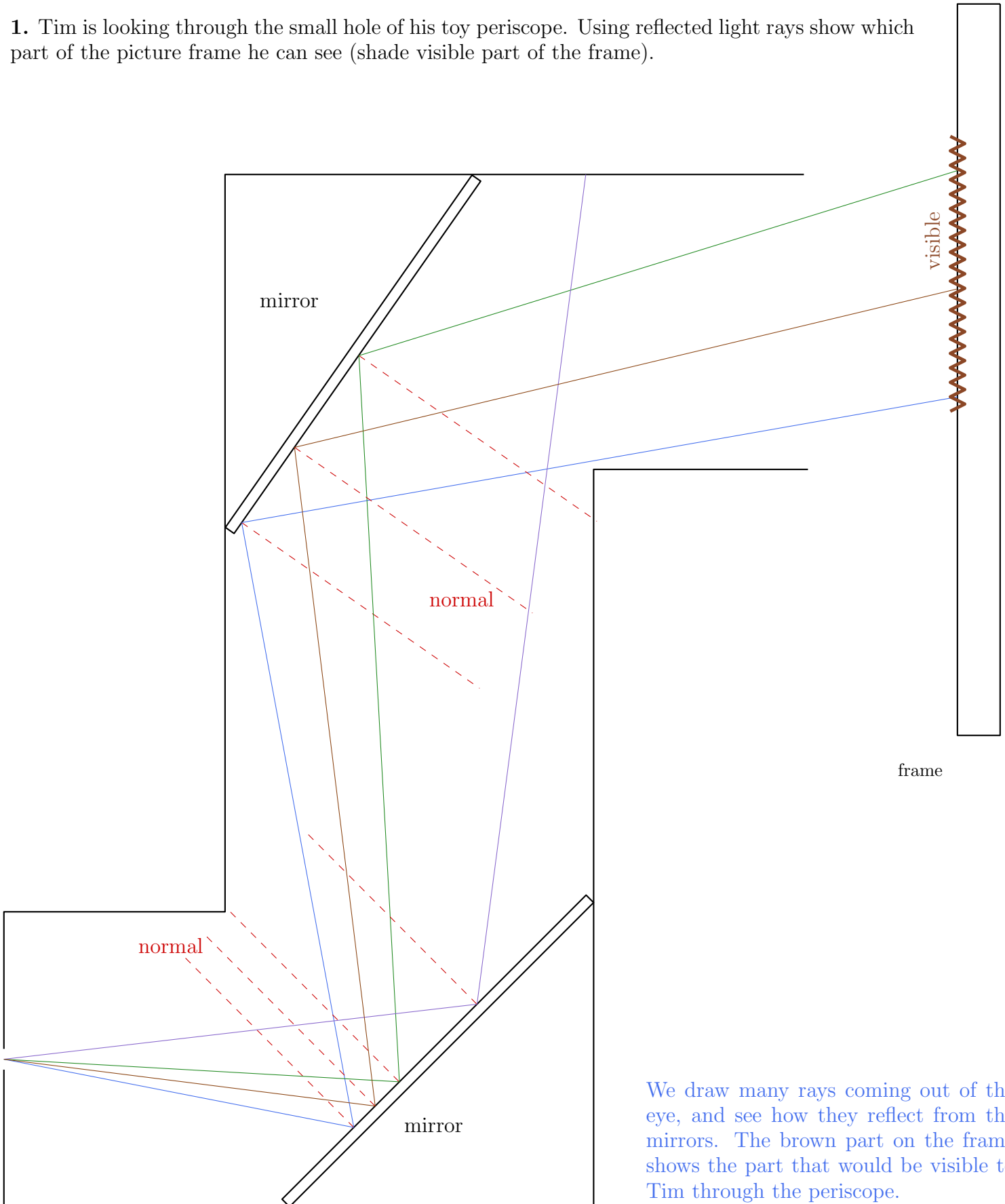
Math 202 Section 4

QUIZ 2 SOLUTIONS

Jan 23, 2008

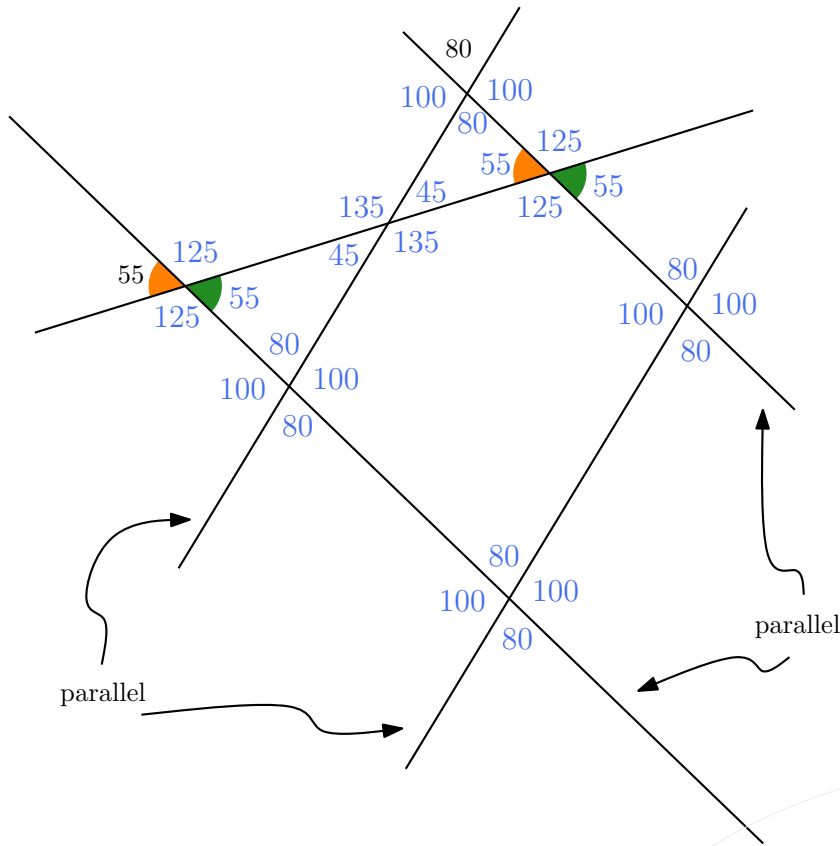
Show your work in all problems.

1. Tim is looking through the small hole of his toy periscope. Using reflected light rays show which part of the picture frame he can see (shade visible part of the frame).



We draw many rays coming out of the eye, and see how they reflect from the mirrors. The brown part on the frame shows the part that would be visible to Tim through the periscope.

2. Using Parallel Postulate and opposite angles, fill in all the unknown angles in the figure.

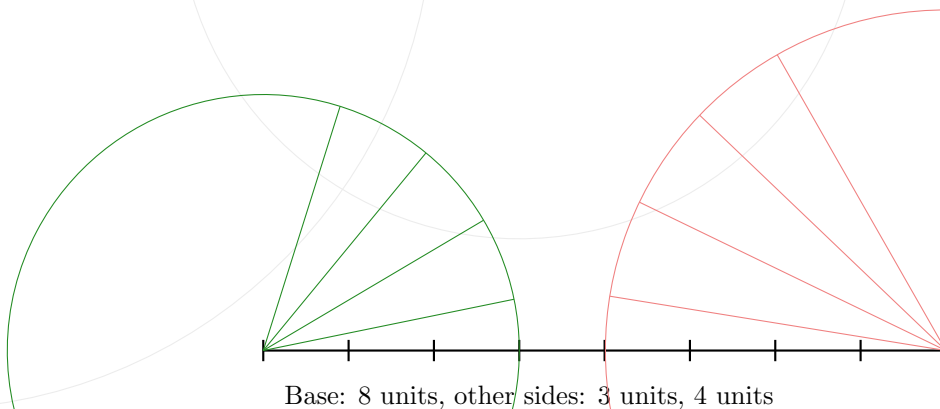
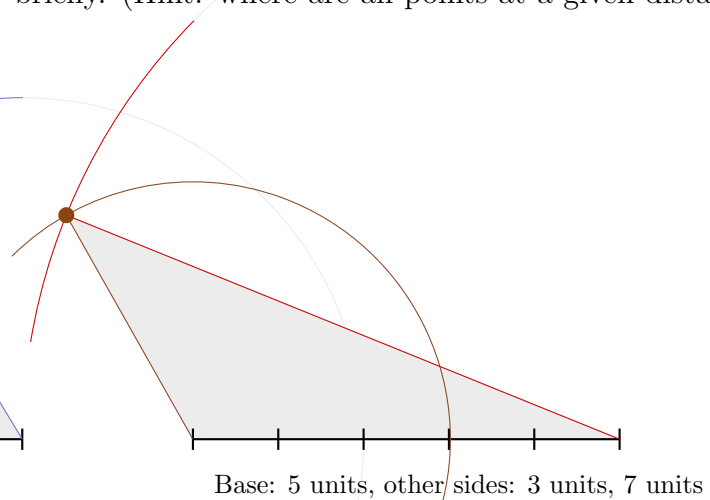
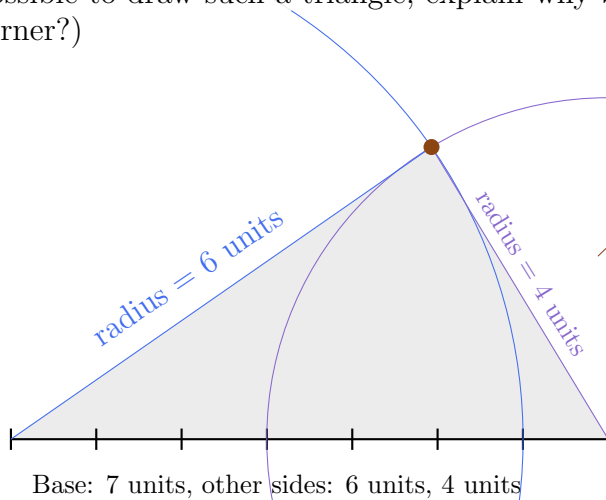


Parallel Postulate: given two parallel lines, and another line intersecting these, the corresponding angles are the same (e.g. angle in the left of the intersections are the same see orange sectors at 55 degree angles)

Opposite angles at the intersection of two lines are the same, see orange and green 55 degrees.

Sum of interior angles of a triangle is 180 degrees.

3. Using a compass and a ruler, draw the following two triangles with given base and side lengths. If it's not possible to draw such a triangle, explain why briefly. (Hint: where are all points at a given distance from a corner?)



There are no points on the plane 3 units from one corner and 4 units from the other corner. So we can't construct such a triangle.