Chapter 5 – Properties & Attributes of Triangles

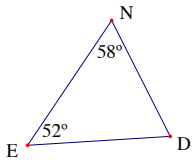
1. There are rods of 5 in. 9 in. and 11 in. on the ground.

a. Can these rods form a triangle?

b. Classify the triangle by sides _____and by angles_____.

c. What if only the 9" and 11" rod were present, then what possible lengths could the third rod be to form a Δ?

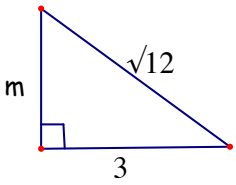
2. Rank the sides of ΔEND from *shortest* to *longest*



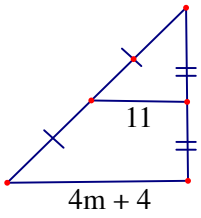
3. Luke and Wyatt left BHS at 5 pm. Wyatt went home, 3.5 miles due south. Luke drove due east for 6 miles. How far apart are the two boys?

#4-8 Solve for m in each diagram.

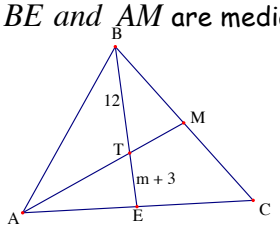
4.



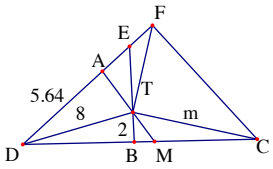
5.



6. $\overline{BE}$ *and* $\overline{AM}$ are medians



7. $\overline{BE}$ *and* $\overline{AM}$ are perpendicular bisectors



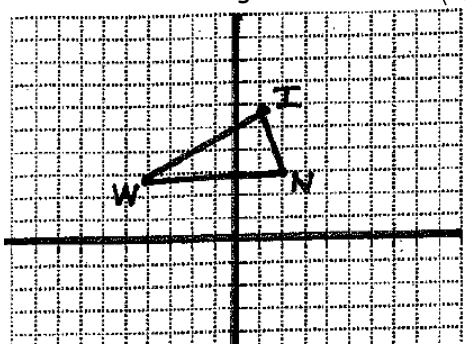
#9-10, Use ΔZIP where Z(5, 10), I(-2, -5) and P(8, 1)

9. Find the equation of the median for side $\overline{IP}$ *in point-slope form.*

10. Find the equation of the altitude from side $\overline{ZI}$ *in slope intercept form.*

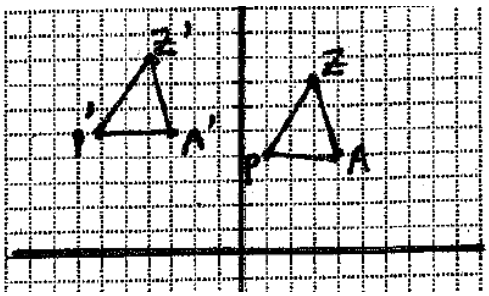
Chapter 12 – Transformational Geometry

1. Translate the triangle with vector $\langle 3, -4 \rangle$

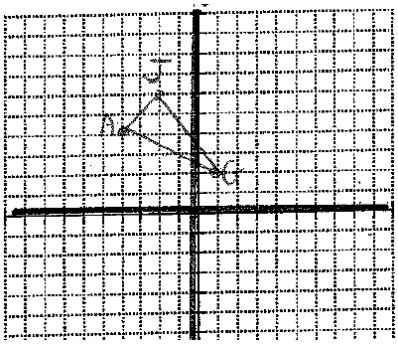


2. The triangle was translated. Write the rule

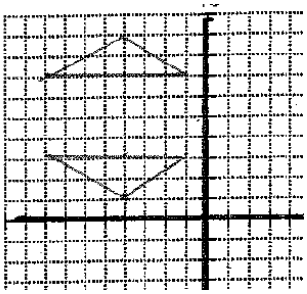
(x,y) ⟶ (,)



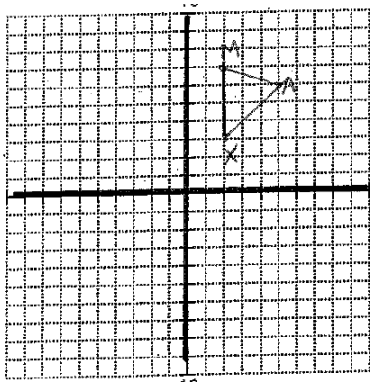
3. Reflect the triangle over x = -2



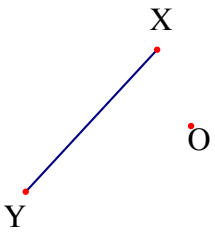
4. What line was the triangle reflected over?



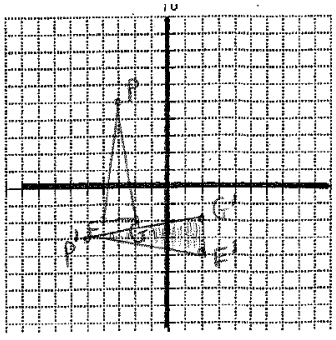
5. Rotate the triangle 180° about origin.



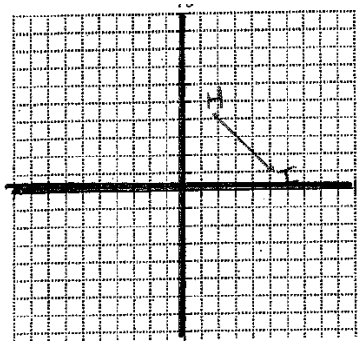
6. Rotate XY 60° clockwise about O.
(Compass & protractor)



7. Give the direction and distance the Δ was rotated about (0,0)

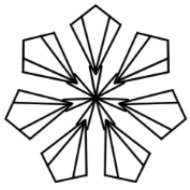


8. Reflect the segment over the x-axis, then $\langle -2, 3 \rangle$



#9-10, Describe the symmetry of each design.

9.



10.