

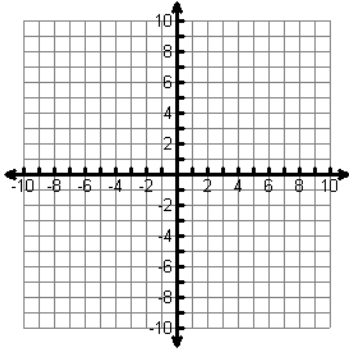
GEOMETRY MIDTERM REVIEW- STUDY GUIDE

UNIT 1, 2 AND 3A

Unit 1... transformations:

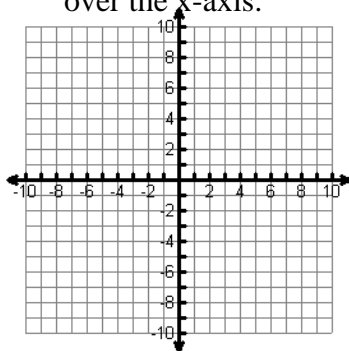
For #1-3, use the graphs below if needed:

1. Rotate the point E(-1, 2) 180° .



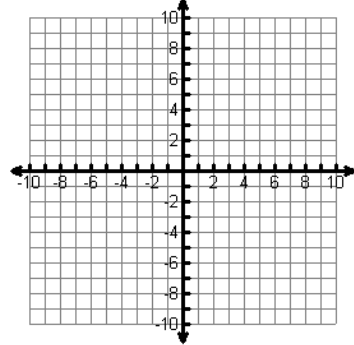
E' (_____, _____)

2. Reflect point G(2, 4) over the x-axis.



G' (_____, _____)

3. Translate the point O(3, 5) by the vector $\langle -4, -2 \rangle$



O' (_____, _____)

**Go back to old study guides, notes, homework, Unit 1 Review WS (handed out on Friday) to study more!*

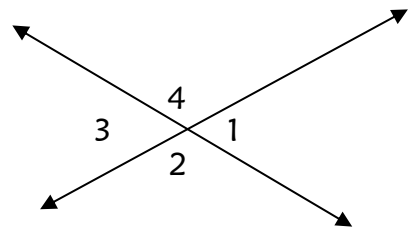
Unit 2 review:

1) E is between G and O. $GE = 8$ and $EO = 11$.
Find the length of GO.

2) Given: $WX = 5$, $XY = 13x - 4$, $YZ = 8x - 3$
And $\overline{WX} \cong \overline{YZ}$.
Find: x and XY.



3) If $m\angle 1 = 5x + 32$ and $m\angle 3 = 3x + 64$ find x.



*Angles 1 and 3 are _____ angles and are _____.

*Angles 1 and 4 are _____ angles and are _____.

Make sure to go back and review angle bisector, interior, vocabulary (coplanar, skew, perpendicular, parallel, collinear, non-collinear, etc).

UNIT 2 VOCAB REVIEW: When we KNOW two lines are parallel, we can set up equations using ANY of the angle pair relationships such that....

- Corresponding Angles are _____
- Alternate Interior Angles are _____
- Alternate Exterior Angles are _____
- Same Side Interior Angles are _____
- Same Side Exterior Angles are _____

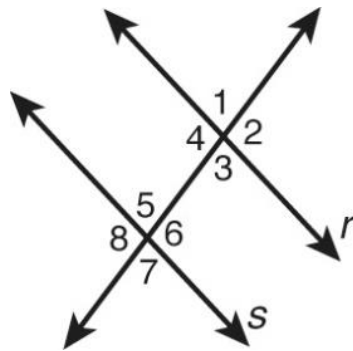
For #4-5, use the diagram below:

4) Find the measures of the angles.

Given: $s \parallel r$,

$$m\angle 2 = (10x + 4)^\circ$$

$$m\angle 6 = (8x + 28)^\circ$$



5) Given: $s \parallel r$ and $m\angle 1 = 70^\circ$

Find.... $m\angle 5$, $m\angle 7$, and $m\angle 2$.

6) Find the slope given the points $(-3, -6)$ and $(12, -1)$

7) Write an equation of the line that goes through $(12, -4)$ and slope = $1/2$.

8) Write an equation of a line in slope-intercept form that passes through the points $(-1, 8)$ and $(4, -2)$.

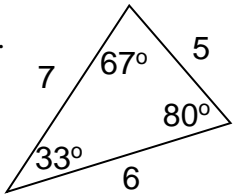
9) Write an equation of a line in point-slope form that passes through the points $(-5, 9)$ and $(0, -6)$.

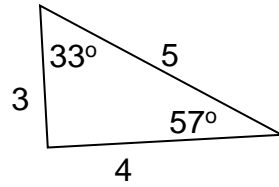
10) Write an equation of a line in slope-intercept form that is parallel to the line $y = -2x + 4$ and passes through the point $(3, 5)$.

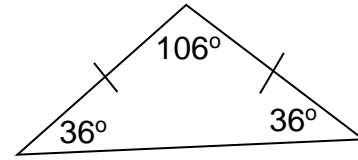
11) Are the lines parallel, perpendicular, or neither? (Hint: Rewrite in $y = mx + b$)
 $5x - 4y = 10$ and $5y = -4x - 6$.

Unit 3a - Triangles

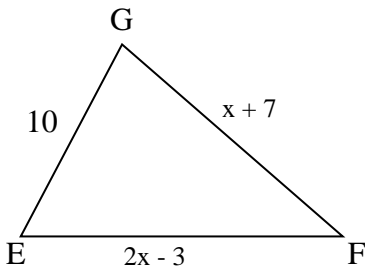
1) Classify each triangle by its ANGLES and SIDES.





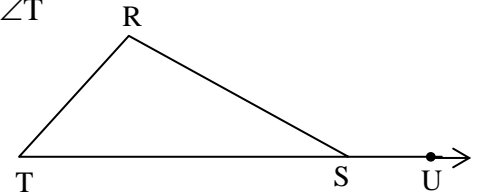


2) If the perimeter of $\triangle EFG$ is 32, is $\triangle EFG$ scalene, isosceles, or equilateral?



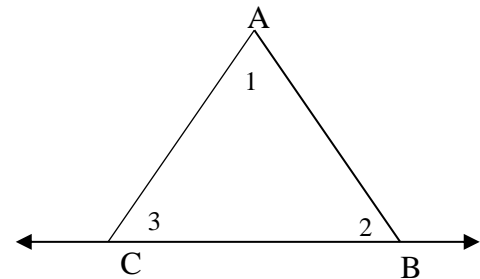
3) Given: $\angle T = (2x + 6)^\circ$
 $\angle RSU = (4x + 16)^\circ$
 $\angle R = (x + 48)^\circ$

Find: x and $m\angle T$



4) Given: $\triangle ABC$ is isosceles with base CB.
 $m\angle 1 = (11x)^\circ$
 $m\angle 3 = 2x$

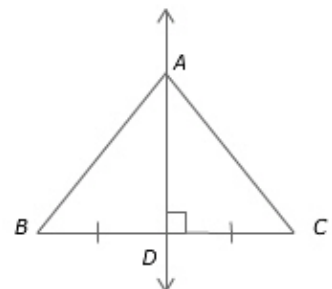
Find: x , $m\angle 1$ and $m\angle 2$



5) Two angles $\angle 7$ and $\angle 8$ are complementary.
 If $m\angle 7 = 54^\circ$, what is the $m\angle 8$?

6) Two angles are supplementary.
 One angle is twice the measure of the other.
 Find the measure of the larger angle.

7) Given \overline{AD} is the perpendicular bisector of \overline{BC} ,
 $AB=10x + 4$, $AC=24$, and $BC = 6x$, find x and DC .



*Now go back to old notes, homework, and study guides and study, study, study!!!