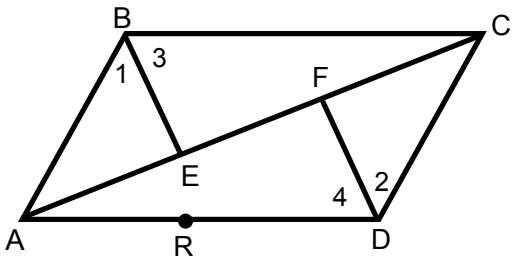
Do Now

1) Name in all possible ways the line containing A, R, D

2) Name all the sides of ∠ABC.

3) What side do ∠2 and ∠4 have in common?

4) Name the horizontal ray with endpoint C.



5) Estimate the sizes of ∠BAD, ∠2 and ∠ABC.

6) Are angles FCD and DCE different angles? Why or why not? How do you know?

7) Can you call ∠2 "∠D" as well? Why or why not? How do you know?

Practice Problems for Quiz (1.1-1.5) Name_____

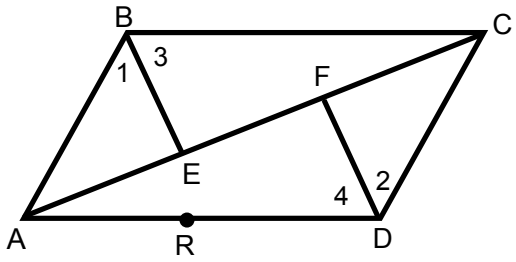
1) $\overrightarrow{EC} \cup \overrightarrow{FA}$ = _____

2) $\overrightarrow{EC} \cap \overrightarrow{FA}$ = _____

3) $\overrightarrow{BA} \cup \overrightarrow{BE}$ = _____

4) $\overleftrightarrow{AC} \cap \overleftrightarrow{DR}$ = _____

5) $\angle AFD \cap \overline{CE}$ = _____



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6) Tell whether each of the following angles *appears* to be acute, right, obtuse, or straight. Which angle's classifications can be assumed form the diagram?

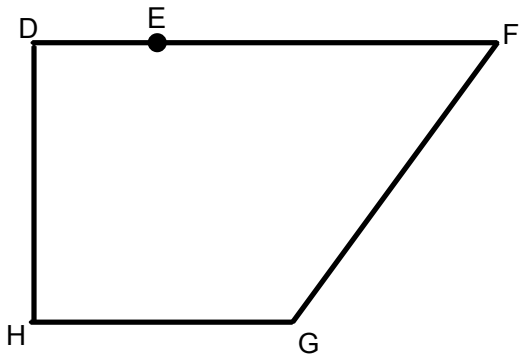
a) ∠H - _____

b) ∠G - _____

c) ∠GFE - _____

d) ∠DEF - _____

e) ∠HDF - _____



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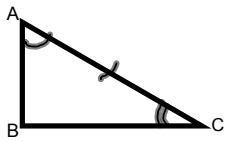
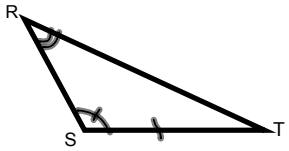
7) a) According to the diagrams, which two **segments** are congruent?

a) According to the diagrams, which two **angles** are congruent?





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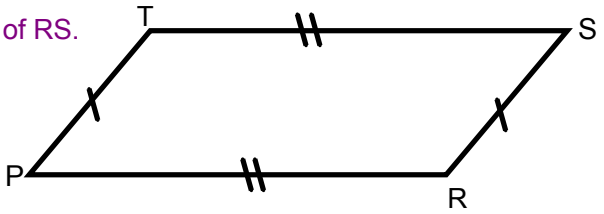
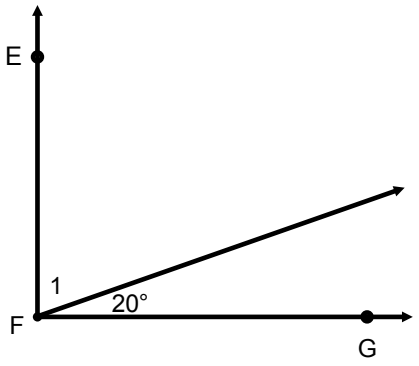
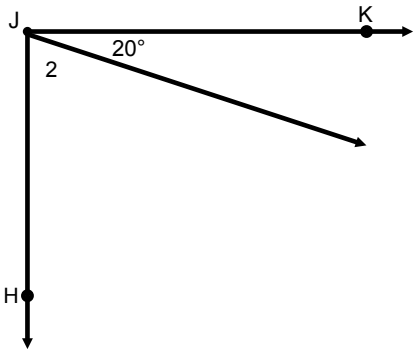
8) The perimeter of PRST is 10 more that 5 times the length of RS. If PR = 26, find RS.



9) a) If ∠EFG is obtuse and ∠HJK is right, is ∠1 ≅ ∠2? How do you know?

b) If ∠EFG ≅ ∠HJK, is ∠1 ≅ ∠2? How do you know?





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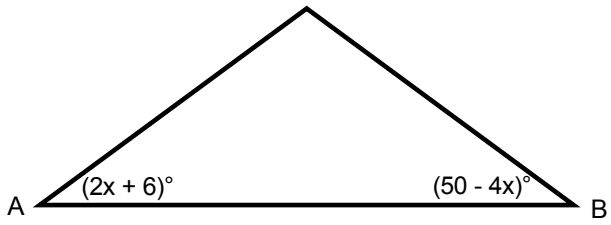
10) If ∠A ≅ ∠B, find m∠A.



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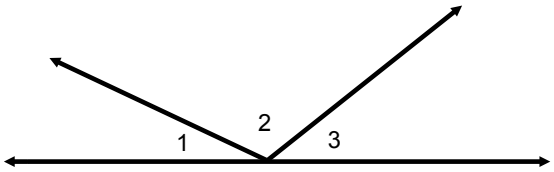
11) The measures of ∠1, ∠2, and ∠3 are in the ratio 1 : 3 : 2. Find the measure of each angle.



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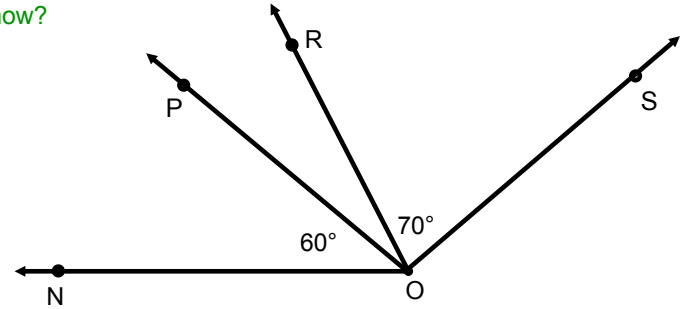
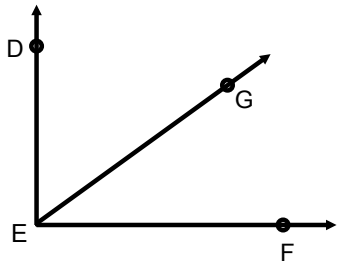
12) Is it possible for both ∠NOR and ∠POS to be right angles?
Why or why not. Tell me how you know?



13) Given: ∠DEG = (x + 3y)°
∠GEF = (2x + y)°
∠DEF is a right angle.
a) Solve for y in terms of x.



b) If ∠DEG ≅ ∠GEF, find the values of x and y.

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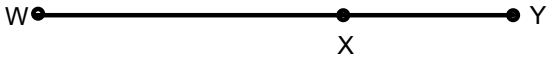
14) Given: WY = 25;
The ratio of WX to XY is 3:2.
Find WX.



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15. The measure of ∠A is 6 greater than twice the measure of ∠B. If the angles's sum is 42°, find the measure of ∠A.

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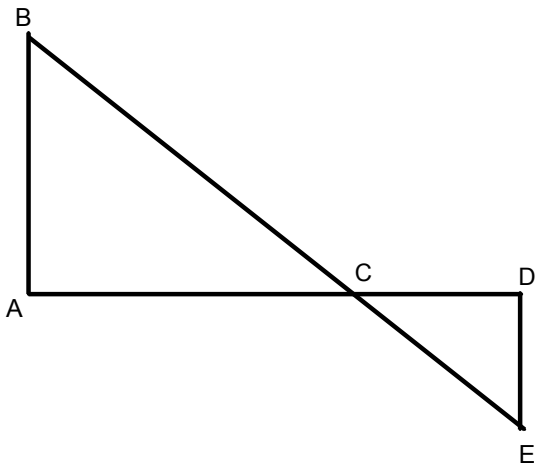
16. What can we assume from this diagram?



17) What are the restrictions on the third side length of a triangle with the following side lengths?

a) 29, 8, x

b) 100, 52, y

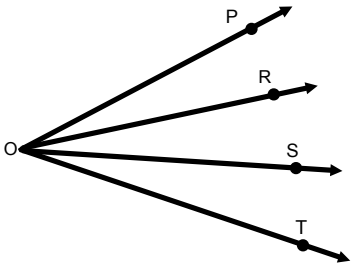
18) Can you make a triangle with sides of length…?

a) 10, 6, 12

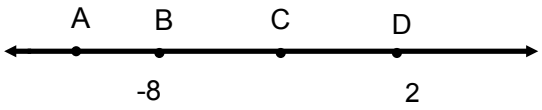
b) 47, 50, 1

c) 100, 60, 40

19. Given: $\overrightarrow{OR}$ and $\overrightarrow{OS}$ trisect $\angle TOP$.
$\angle TOP = 57.6°$
Find: $m\angle POR$



20) a) Find the coordinate of C (the midpoint of BD).



b) If AD = 15, find the coordinate of A.

21) $\angle Q$ is obtuse.

a) What are the limitations on $m\angle Q$?
(Write two inequalities)

b) What are the restrictions on x?