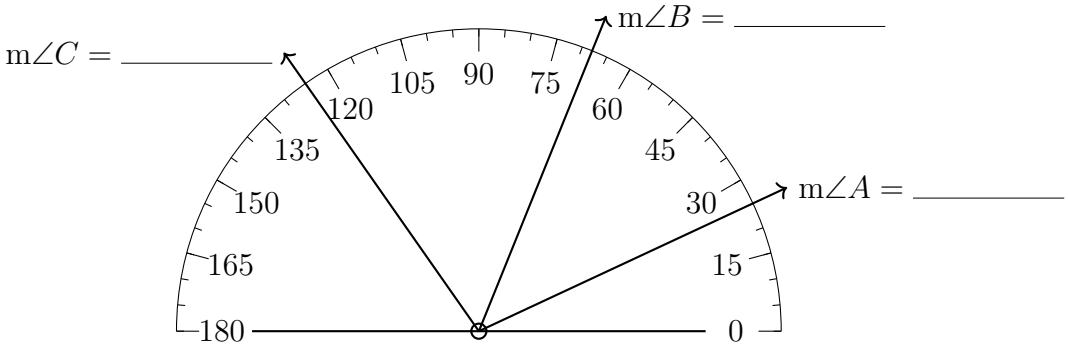
BECA/Huson/Geometry: Construction
8 October 2024

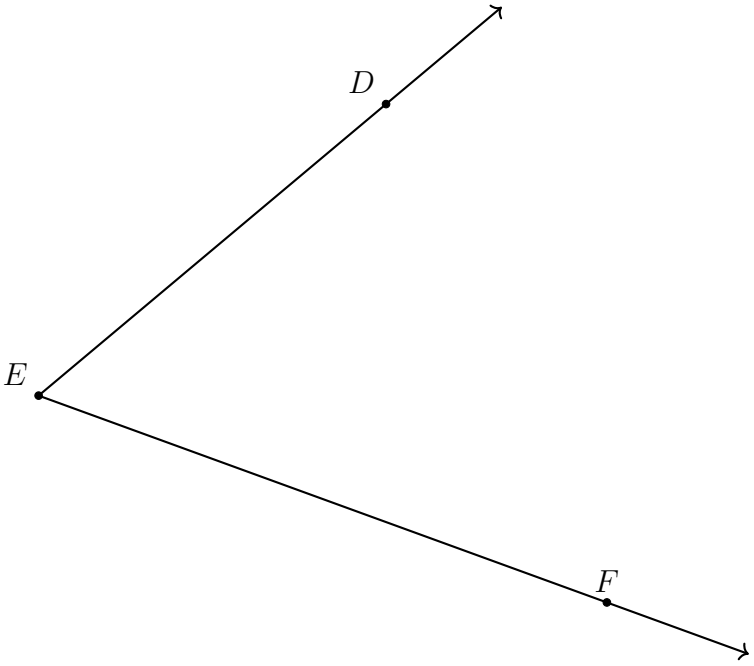
First and last name:
Section:

1.21 Classwork: Angle measures, transversals

1. Use the image of the protractor to measure each of the angles.



2. (a) Write down the name of the angle below using proper geometric notation.
   (b) Find the measure of the angle in degrees with a protractor.
   (c) Is it an acute, obtuse, or right angle?



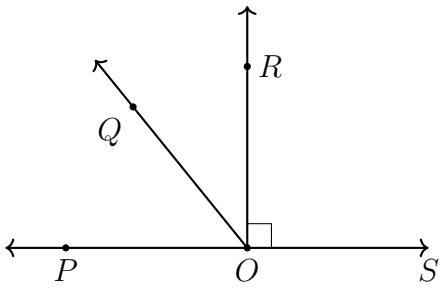
3. Circle True or False for each statement.

   (a) T F Point P is the vertex

   (b) T F $\overrightarrow{OP}$, $\overrightarrow{OS}$ are opposite rays

   (c) T F $\text{m}\angle ROS = 90°$

   (d) T F $\angle QOS$ is an acute angle



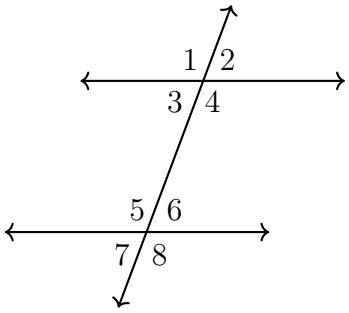
4. Given two parallel lines and a transversal, as shown, with m$\angle 6 = 70°$. Write down the value of each angle measure.

   (a) m$\angle 1 =$ (e) m$\angle 5 =$

   (b) m$\angle 2 =$ (f) m$\angle 6 =$

   (c) m$\angle 3 =$ (g) m$\angle 7 =$

   (d) m$\angle 4 =$ (h) m$\angle 8 =$



5. Label the relationship of each pair: adjacent, vertical, corresponding, alternate interior, same side interior, alternate exterior, or same side exterior

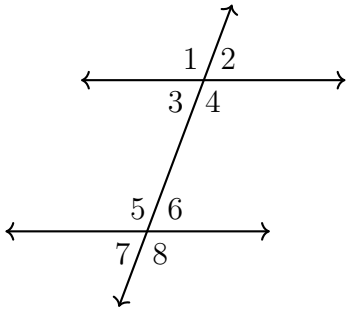
   (a) $\angle 1, \angle 4$

   (b) $\angle 3, \angle 6$

   (c) $\angle 5, \angle 3$

   (d) $\angle 6, \angle 2$

   (e) $\angle 1, \angle 8$



6. Identify each angle

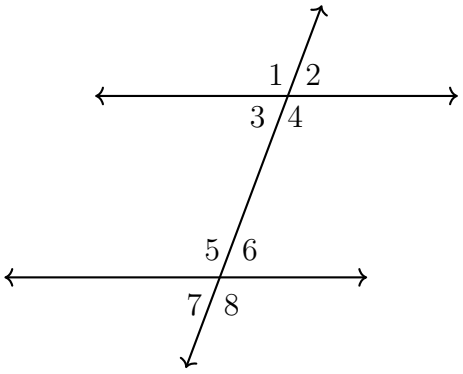
   (a) Opposite $\angle 4$

   (b) Corresponding to $\angle 3$

   (c) Alternate exterior to $\angle 8$

   (d) Same side interior to $\angle 5$

   (e) Alternate interior to $\angle 4$



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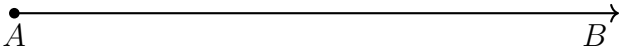
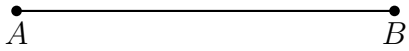
7. Using the given ray $\overrightarrow{AB}$ as one leg, draw an angle that measures 55°.



8. Draw the square $ABCD$ having the base $\overline{AB}$. (use a straight edge and protracter or square to work accurately)
   (a) Label the vertices C, D and mark the side congruencies with hash marks. Measure and mark the length in centimeters of $\overline{AB}$. (label the units)
   (b) Draw the diagonal $\overline{AC}$ with a dashed line. Measure and label its length rounded to the *nearest tenth of a centimeter* (nearest millimeter).



9. Write the appropriate name for the type of angle depending on its measure in degrees. (acute, right, obtuse, or straight)
   (a) $m\angle = 90$: _____
   (b) $90 < m\angle < 180$: _____
   (c) $0 < m\angle < 90$: _____
   (d) $m\angle = 180$: _____