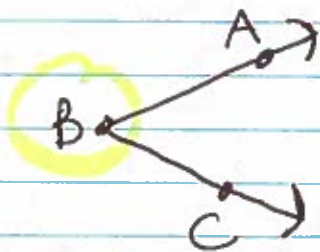


Day 5

1-6 Measuring Angles

An angle (\angle) is formed by 2 rays with the same endpoint.

the common ~~the~~ endpoint = **vertex**



rays \overrightarrow{BA} and \overrightarrow{BC}

for $\angle ABC$.



can also call it

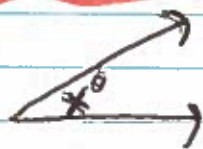
$\angle B$

or $\angle CBA$

you name an angle by its vertex

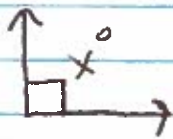
classify angles by their measure:

1. Acute



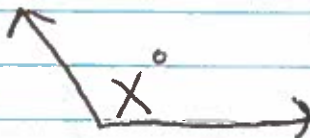
Less than 90°
 $0^\circ < x < 90^\circ$

2. right



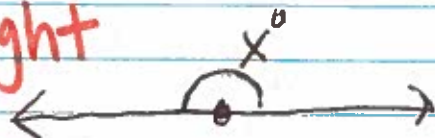
$x = 90^\circ$

3. obtuse



Bigger than 90°
 $90^\circ < x < 180^\circ$

4. straight

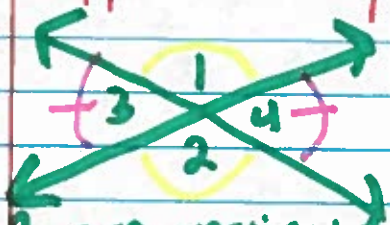


$x = 180^\circ$

Types of \angle 's

① Vertical

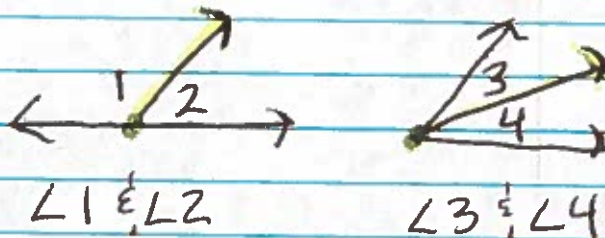
- 2 \angle 's whose sides are opposite rays



$\angle 1 \hat{=} \angle 2$ are vertical
 $\angle 3 \hat{=} \angle 4$ are vertical

② Adjacent

- 2 coplanar angles with a common side & vertex and no common interior pts.

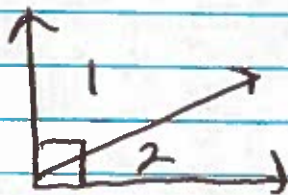


$\angle 1 \hat{=} \angle 2$

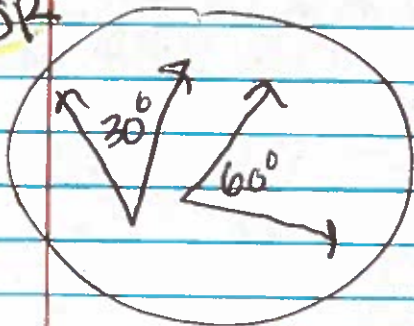
$\angle 3 \hat{=} \angle 4$

③ Complementary

- 2 \angle 's whose sum is 90°

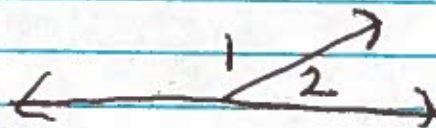


OR

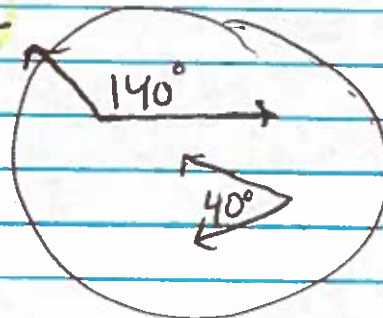


④ Supplementary

- 2 \angle 's whose sum is 180°

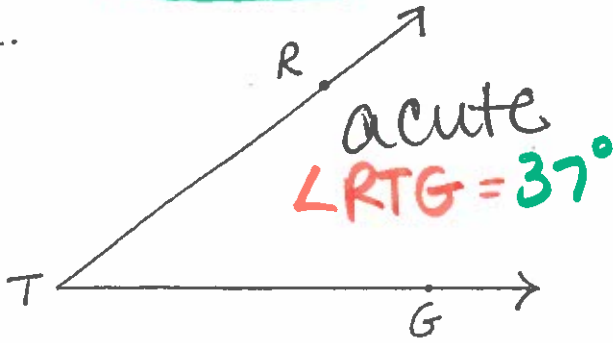


OR

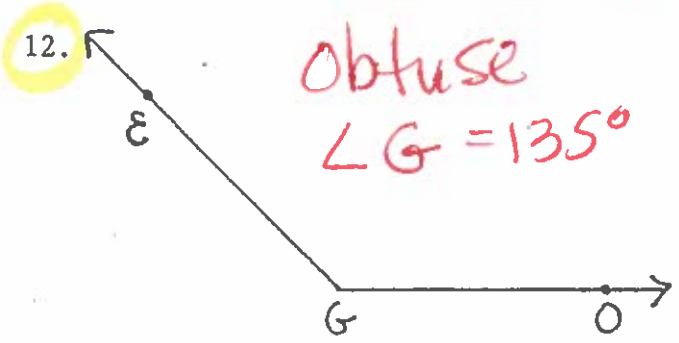


****First classify the angle as ACUTE, RIGHT, OBTUSE or STRAIGHT. Then name the angle and find its measure.****

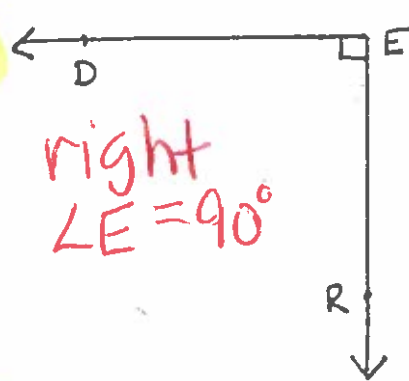
11.



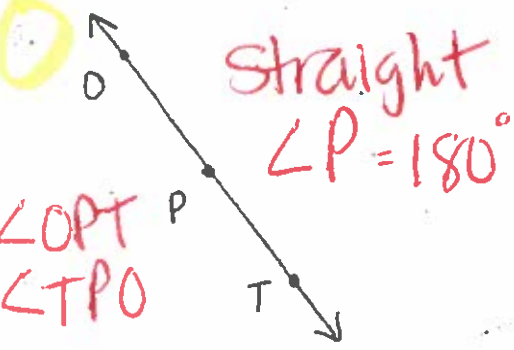
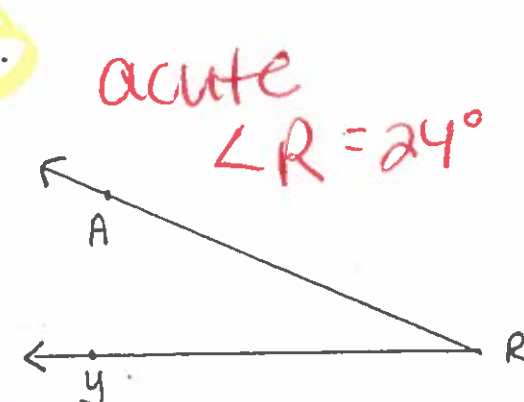
12.



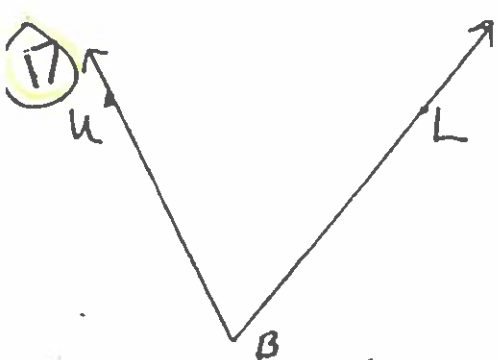
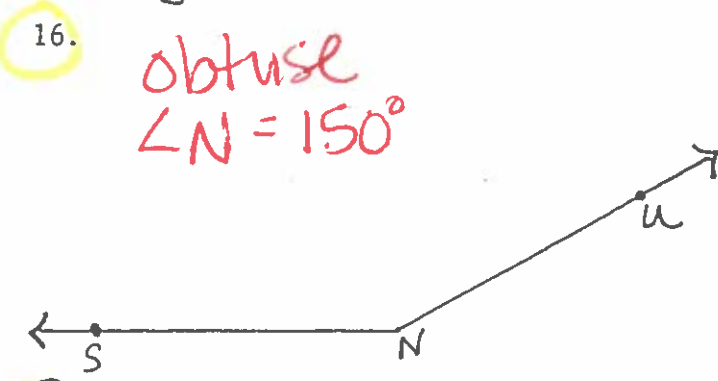
3.



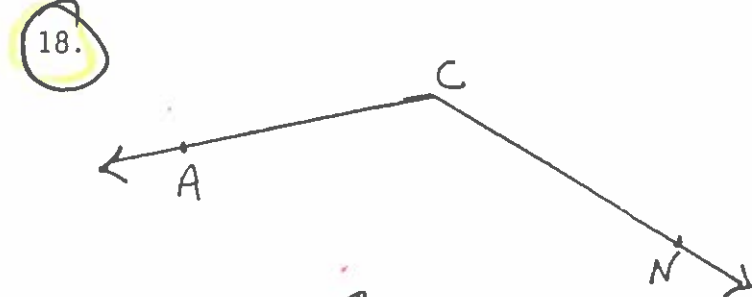
14.



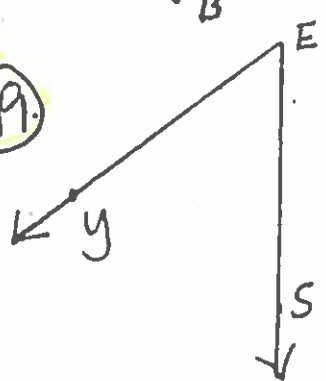
16.



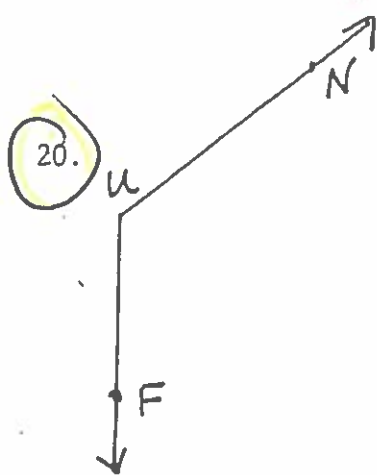
18.



19.



20.



NAME _____

PERIOD 1

Draw the figure.**

1. \overrightarrow{RY}

2. \overline{ST}

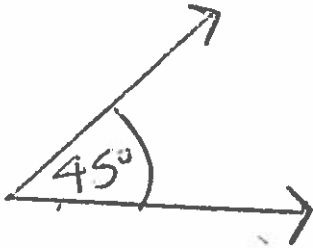
3. \overleftrightarrow{LE}

4. \overleftrightarrow{YX}

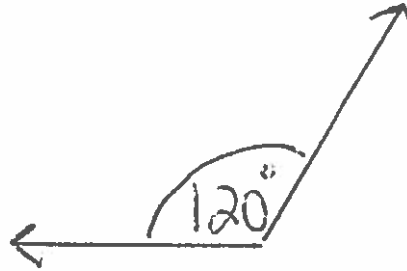
5. ~~4~~ FUN

Draw angles having these measures.**

6. 45°



7. 120°



8. 75°

9. 163°

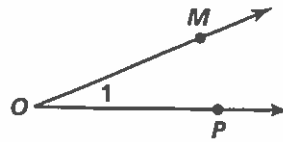
10. 12°



Practice 1-6

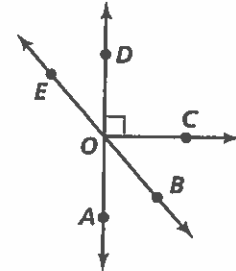
Measuring Angles

1. Name the angle at the right in three different ways.



Name an angle or angles in the diagram described by each of the following.

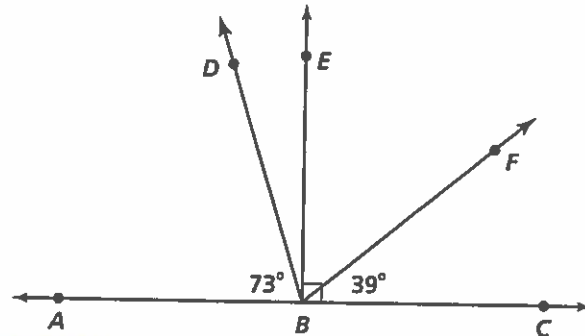
2. complementary to $\angle BOC$
3. supplementary to $\angle BOC$
4. adjacent and congruent to $\angle AOC$



Find the measure of each angle.

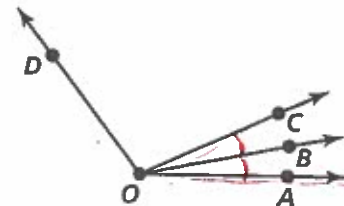
5. $\angle EBF$
6. $\angle EBA$
7. $\angle DBE$
8. $\angle DBC$
9. $\angle ABF$
10. $\angle DBF$

11. Name all acute angles in the figure.
12. Name all obtuse angles in the figure.
13. Name all right angles in the figure.



Use the diagram to the right for Exercises 14 and 15. Solve for x . Find the angle measures.

14. $\angle AOB = x + 3$, $\angle AOC = 2x + 11$, $\angle BOC = 4x - 7$
15. $\angle COD = 9x + 4$, $\angle BOC = 4x - 1$, $\angle BOD = 14x - 6$



(14) $m\angle AOB + m\angle BOC = m\angle AOC$
 $x + 3 + 4x - 7 = 2x + 11$

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