

Good afternoon! Please complete the following in your journals

Steven completed the algebra problem to the right as shown. Has he made any errors? Support your position with evidence in complete sentences.

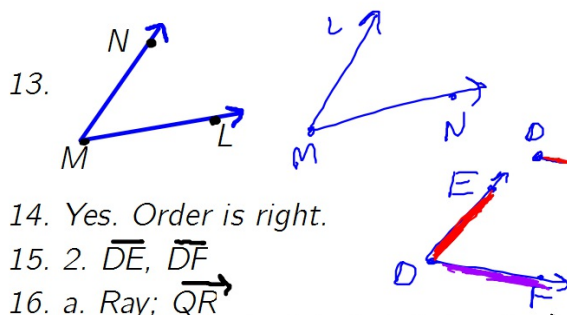
$$\begin{aligned}4x - 12 &= 8x - 20 \\+ 12 &\quad + 12 \\4x &= 8x + 8 \\12x &= 8 \\12 &\quad 12 \\x &= 8/12\end{aligned}$$

*If he has made errors, correct them.
If he has not, show that his answer is correct.*

Need a journal? You may adopt one of last year's surpluses from the table at the back of the room.

Red pens in boxes. Please return to box when finished.

Homework solutions:



14. Yes. Order is right.

15. 2. \overline{DE} , \overline{DF}

16. a. Ray; \overrightarrow{QR}

~~ABC~~ b. Line; \overleftrightarrow{AB} , \overleftrightarrow{BA} , \overleftrightarrow{AC} , \overleftrightarrow{CA} , \overleftrightarrow{BC} , \overleftrightarrow{CB}

c. Angle; $\angle G$, $\angle 4$, $\angle FGH$, $\angle HGF$

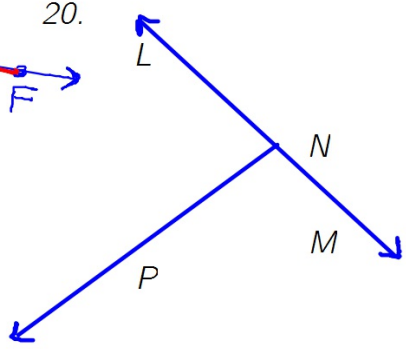
d. Plane; Plane P, Plane LNM,
Plane MNL, Plane LMN
Plane MLN, Plane NML
Plane NLM

17. 5 rays; \overrightarrow{SR} , \overrightarrow{ST} , \overrightarrow{SU} , \overrightarrow{RU} , \overrightarrow{UR}

18. There are multiple angles with vertex S.

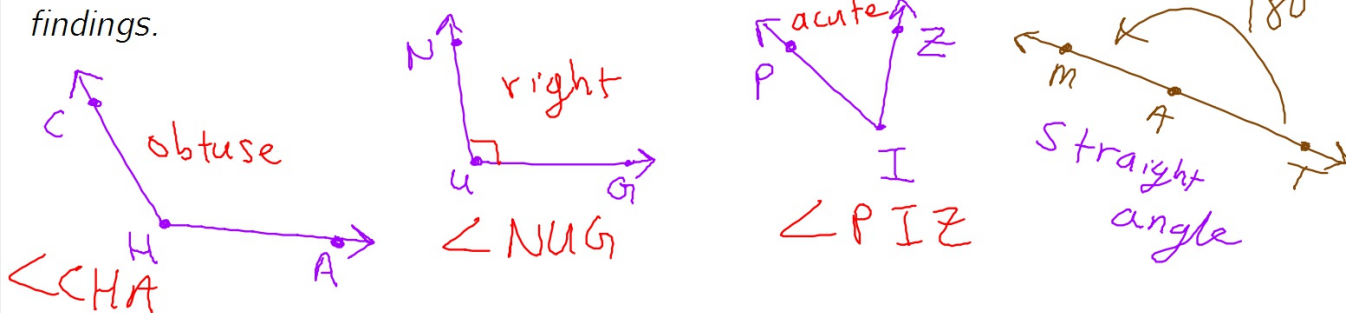
19. $\angle TSU$, $\angle UST$

20.



Angle Pairs and Circles (CO-A1b)

Turn in your books to page 7 and quietly answer problem 1 individually. After 90 seconds, you will discuss with your elbow partner how you made your choices. Then, you will work on #2 together and we will share our findings.



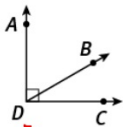
a.)



shared vertex

$$\angle 1 + \angle 2 = 180^\circ$$

b.)

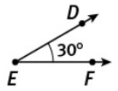


$\angle ADC = \text{right}$
 $\angle ADB$
 $\angle BDC$ } acute

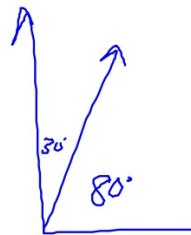
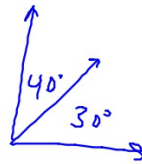
shared vertex

$$\angle BDC + \angle ADB = 90^\circ$$

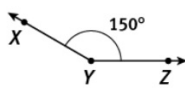
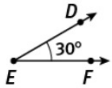
c.) acute



acute

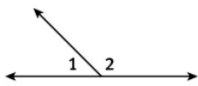


d.) acute

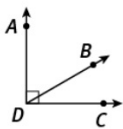


obtuse

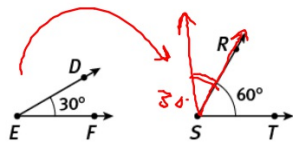
1



2

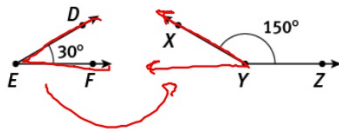


3



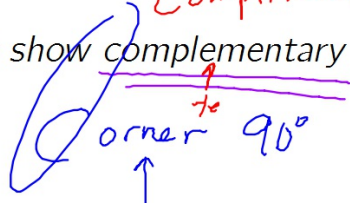
$30 + 60 = 90$

4

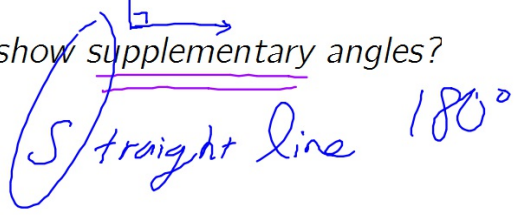


Compliment

Which show complementary angles?



Which show supplementary angles?



Recall that the sum of the measures of *complementary angles* is 90° and the sum of the measures of *supplementary angles* is 180° .

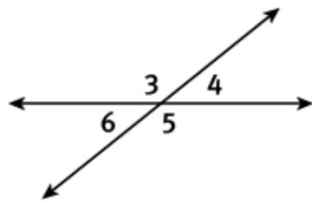
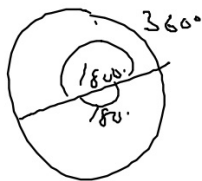
3. a. The figure below shows two intersecting lines. Name two angles that are supplementary to

$\angle 4$. ~~$\angle 4 + \angle 6 = 180^\circ$~~

~~$\angle 3 + \angle 4 = 180^\circ$~~

$\angle 5 + \angle 4 = 180^\circ$

- b. Reason quantitatively. Explain why the angles you named in part a must have the same measure.



$$\begin{array}{r}
 \cancel{\angle 3 + \angle 4 = 180^\circ} \\
 - \cancel{\angle 5 + \angle 4 = 180^\circ} \\
 \hline
 \angle 3 - \angle 5 + 0 = 0^\circ \\
 \angle 3 - \angle 5 = 0 \\
 \quad \quad \quad \cancel{+ \angle 5} \quad \quad \quad \cancel{+ \angle 5} \\
 \hline
 \angle 3 = \angle 5
 \end{array}$$

Circle Terms (p. 9)

Place the three items listed below into the circle. Compare your result with those at your table and decide who has the correct representation.

