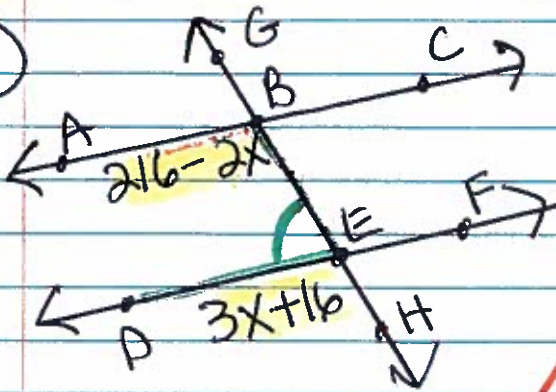


Day 24

3.4

Algebra with Angles Notes

①



Name the type of angles:

Corresponding (\cong)

Find x. 40

$m\angle ABE = 136^\circ$

$m\angle BED = 44^\circ$

$m\angle DEH = 136^\circ$

$$\begin{array}{r|l} 216 - 2x & = 3x + 16 \\ + 2x & + 2x \\ \hline 216 & = 5x + 16 \\ - 16 & - 16 \\ \hline 200 & = 5x \\ 5 & \div 5 \\ \hline 40 & = x \end{array}$$

$m\angle ABE = 216 - 2x$
 $= 216 - 2 \cdot 40$
 $= 216 - 80$
 $= 136$

$\angle BED = 180 - 136$

$40 = x$

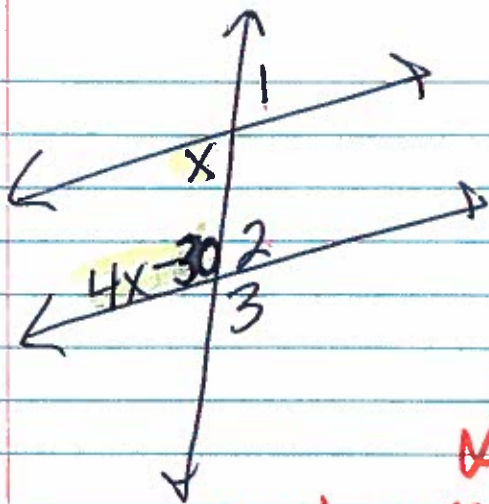
vertical, corresponding, alternate interior
~~alternate exterior~~ \cong ~~linear pair~~

Supplementary

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

} same-side interior
 linear pair





name \angle 's:

Same-side interior

Find x :

$m\angle 1 =$	<u>42°</u>
$m\angle 2 =$	<u>42°</u>
$m\angle 3 =$	<u>138°</u>

$180 - 42$

which means they add up to 180°

$$\begin{aligned}
 1x + 4x - 30 &= 180^\circ \\
 5x - 30 &= 180^\circ \\
 \underline{+30} \quad \underline{+30} & \\
 5x &= 210 \\
 \underline{5} \quad \underline{5} & \\
 x &= 42
 \end{aligned}$$

HW: 3.4 triangle wkst