

Warm-up

Draw ① $\angle DEF = 59^\circ$

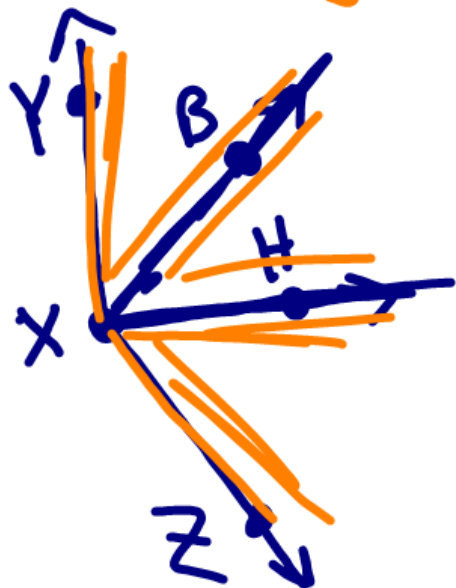
② $\angle NEH = 119^\circ$

③ $\angle RGT = 90^\circ$



Name all angles for.

④



$\angle ZXB$

$\angle YXB$

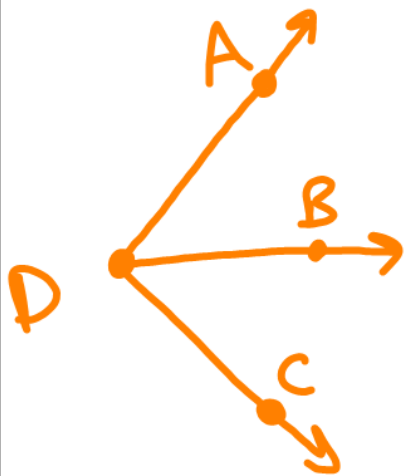
$\angle BXZ$

$\angle BXH$

$\angle HXZ$

$\angle YXH$

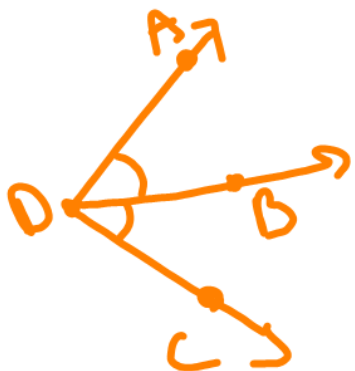
1.4b Angle Addition



For $\angle ADC$

- B is on the interior
- \overrightarrow{DB} is an interior ray

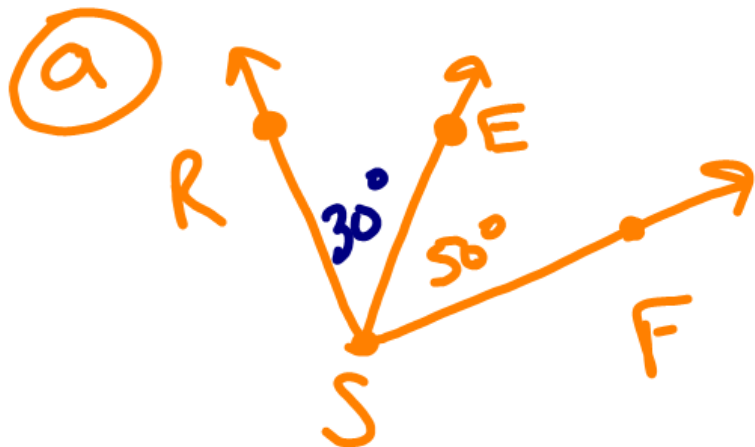
* It could bisect if it



) means \cong \angle 's.
So $\angle ADB \cong \angle BDC$

$$\angle ADB + \angle BDC = \angle ADC$$

Find angle measures



$$\angle RSF = 80^\circ$$

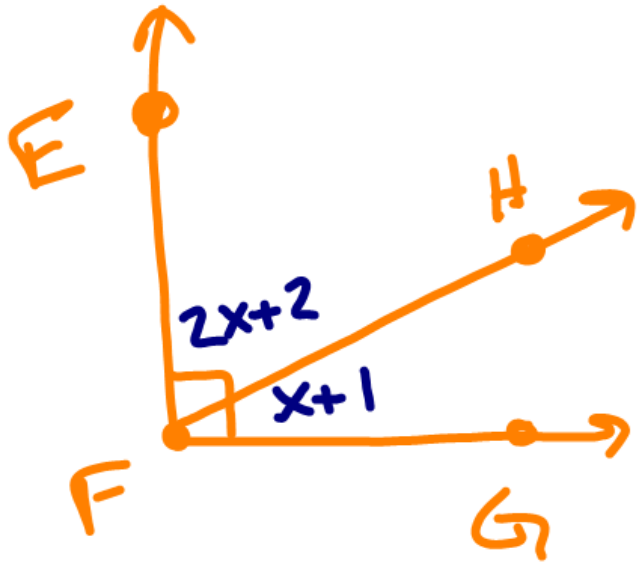
$$\angle RSE = 30^\circ$$

$$\angle ESF = \text{Big } \angle - \text{Small } \angle$$

$$80 - 30 = 50$$

$$30^\circ + 50^\circ = 80^\circ$$

$\angle EFG$ is a rt \angle . Find $\angle EFH$ & $\angle HFG$
 $90^\circ \uparrow$



Small \angle + small \angle = big \angle

$$2x+2 + 1x+1 = 90$$

$$3x + 3 = 90$$

$$-3 \quad -3$$

$$3x = 87$$

$$x = 29$$

$$\angle EFH = 2(29) + 2 = 60^\circ$$

$$\angle HFG = 29 + 1 = 30^\circ$$