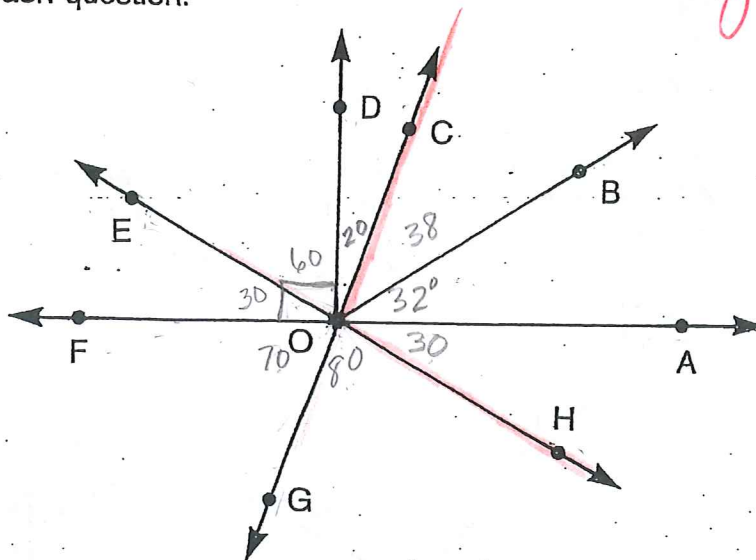


Intersecting Lines

Key

Use the diagram to answer each question.

- $m\angle AOB = 32^\circ$
- $m\angle COD = 20^\circ$
- $m\angle GOH = 80^\circ$
- $m\angle DOF = 90^\circ$



1. Name the perpendicular lines.

\overline{FA} and \overline{DO}

2. $\angle DOE$ is adjacent to which angle?

$\angle EOF$ and $\angle DOC$

3. Which angle is the complement of $\angle DOE$?

$\angle EOF$

4. Which angle is the supplement of $\angle COE$?

$\angle EOG$

5. $m\angle DOE =$ 60°

6. $m\angle EOF =$ 30°

7. $\angle FOE$ and which angle are vertical angles?

$\angle AOH$

8. $\angle COH$ and which angle are vertical angles?

$\angle EOG$

9. $m\angle COB =$ 38°

10. $m\angle AOH =$ 30°

11. $m\angle FOG =$ 70° $180 - 110$

12. $m\angle FOA =$ 180°

13. Does the $m\angle EOF + m\angle FOG$ equal the measure of a right angle?

no

14. Does the $m\angle DOE + m\angle EOF + m\angle FOG$ equal the measure of a straight angle?

yes

15. $m\angle BOE =$ 118°

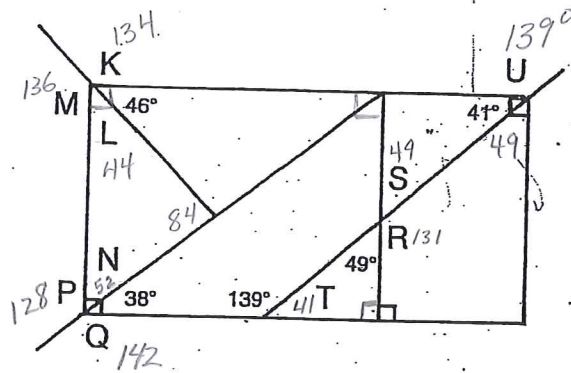
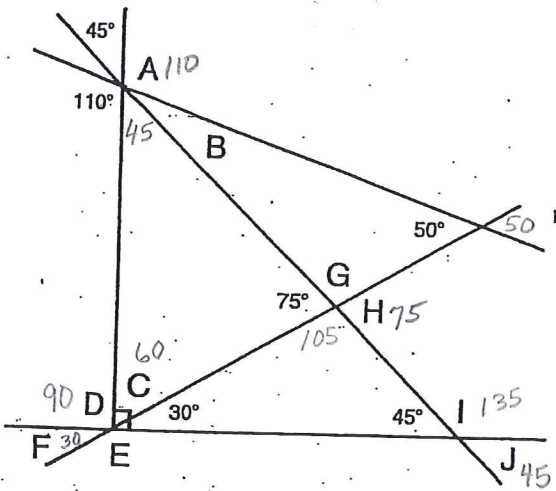
16. $m\angle BOG =$ 218°

Angles

Key

Who was the first American woman doctor?

Without measuring, find the measure for each angle.
Write the corresponding letter above each measure in the code.



- | | | | | | | | | |
|-----------------|-------------|---|-----------------|-------------|---|-----------------|-------------|---|
| 1. $m\angle A$ | <u>110°</u> | W | 2. $m\angle B$ | <u>25°</u> | C | 3. $m\angle C$ | <u>60°</u> | Z |
| 4. $m\angle D$ | <u>90°</u> | L | 5. $m\angle E$ | <u>150°</u> | B | 6. $m\angle F$ | <u>30°</u> | T |
| 7. $m\angle G$ | <u>105°</u> | H | 8. $m\angle H$ | <u>75°</u> | D | 9. $m\angle I$ | <u>135°</u> | L |
| 10. $m\angle J$ | <u>45°</u> | E | 11. $m\angle K$ | <u>134°</u> | K | 12. $m\angle L$ | <u>44°</u> | I |
| 13. $m\angle M$ | <u>136°</u> | A | 14. $m\angle N$ | <u>52°</u> | L | 15. $m\angle P$ | <u>128°</u> | E |
| 16. $m\angle Q$ | <u>142°</u> | B | 17. $m\angle R$ | <u>131°</u> | L | 18. $m\angle S$ | <u>49°</u> | R |
| 19. $m\angle T$ | <u>41°</u> | A | 20. $m\angle U$ | <u>139°</u> | E | | | |

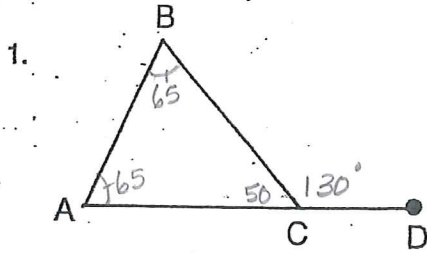
D R E L I Z A B E T H
 75° 49° 45° 90° 44° 60° 41° 142° 128° 30° 105°

B L A C K W E L L
 150° 52° 136° 25° 134° 110° 139° 135° 131°

Polygons

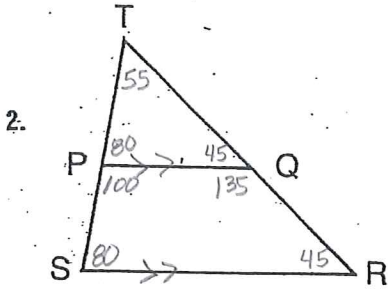
Key

Find the missing angle measures in the polygons below.



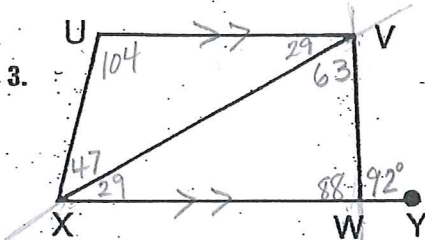
$\angle A \cong \angle B$
 $m\angle B = 65^\circ$

$m\angle A = \underline{65^\circ}$
 $m\angle BCA = \underline{50^\circ}$
 $m\angle BCD = \underline{130^\circ}$



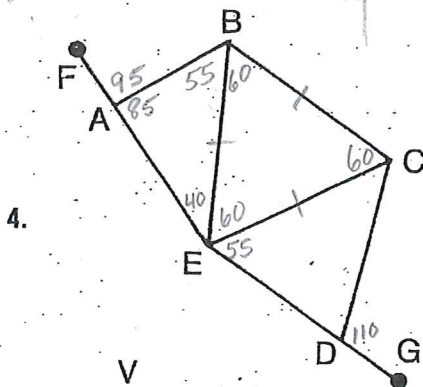
$m\angle T = 55^\circ$
 $m\angle PQR = 135^\circ$
 $PQ \parallel SR$

$m\angle R = \underline{45^\circ}$
 $m\angle S = \underline{80^\circ}$
 $m\angle SPQ = \underline{100^\circ}$



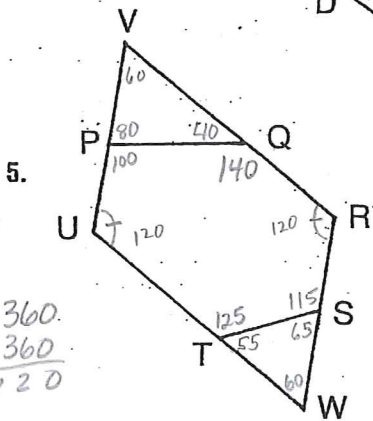
$m\angle VWY = 92^\circ$
 $m\angle XWV = 63^\circ$
 $m\angle UXV = 47^\circ$
 $UV \parallel XY$

$m\angle UVX = \underline{29^\circ}$
 $m\angle VXW = \underline{29^\circ}$
 $m\angle U = \underline{104^\circ}$
 $m\angle XWV = \underline{88^\circ}$



$m\angle FAB = 95^\circ$
 $m\angle AEB = 40^\circ$
 $m\angle CDG = 110^\circ$
 $m\angle CED = 55^\circ$
 $\triangle BCE$ is equilateral

$m\angle ABE = \underline{55^\circ}$
 $m\angle BCE = \underline{60^\circ}$
 $m\angle EBC = \underline{60^\circ}$



$m\angle V = 60^\circ$
 $m\angle PQR = 140^\circ$
 $m\angle UTS = 125^\circ$
 $m\angle W = 60^\circ$
 $m\angle TUP = m\angle SRQ$

$m\angle QPU = \underline{100^\circ}$
 $m\angle RST = \underline{115^\circ}$
 $m\angle U = \underline{120^\circ}$
 $m\angle R = \underline{120^\circ}$

$$\begin{array}{r} 360. \\ + 360. \\ \hline 720 \end{array}$$

