

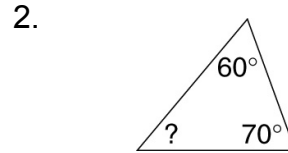
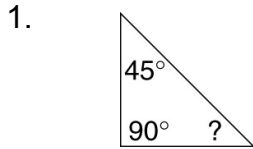
**LESSON**

**4**

**Geometric Figures**

**Practice A: Angles in Polygons**

Find the unknown angle measure in each polygon. Choose the letter for the best answer.



A  $45^\circ$

C  $90^\circ$

F  $40^\circ$

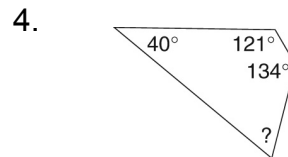
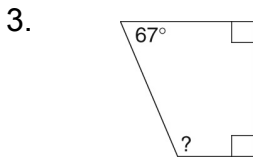
H  $60^\circ$

B  $55^\circ$

D  $135^\circ$

G  $50^\circ$

J  $70^\circ$



A  $313^\circ$

C  $113^\circ$

F  $46^\circ$

H  $140^\circ$

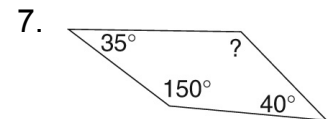
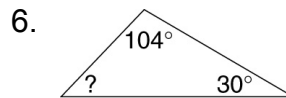
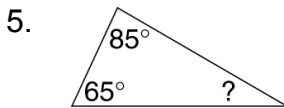
B  $170^\circ$

D  $27^\circ$

G  $65^\circ$

J  $245^\circ$

Find the unknown angle measure in each polygon.

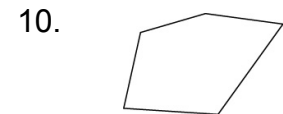
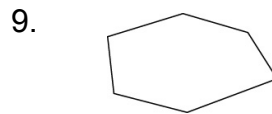
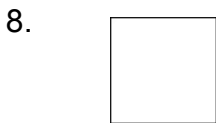


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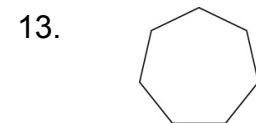
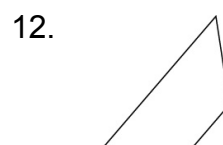
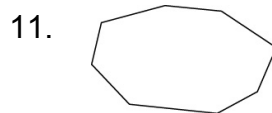
Divide each polygon into triangles to find the sum of its interior angles.



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. If the lines form square corners, they are  $90^\circ$  angles.

4.  $\overrightarrow{WY} \perp \overrightarrow{WF}$

5. Possible answer:  
 $\overline{TV}$  and  $\overline{ME}$  are skew.

**Puzzles, Twisters & Teasers**

T:  $54^\circ$       N:  $90^\circ$   
 E:  $110^\circ$      W:  $125^\circ$   
 T:  $20^\circ$       E:  $30^\circ$

A T W E E T M E N T

**Answers for Lesson 4**

**Practice A**

- |                 |                 |
|-----------------|-----------------|
| 1. A            | 2. G            |
| 3. C            | 4. G            |
| 5. $30^\circ$   | 6. $46^\circ$   |
| 7. $135^\circ$  | 8. $360^\circ$  |
| 9. $720^\circ$  | 10. $540^\circ$ |
| 11. 1,080°      | 12. $360^\circ$ |
| 13. $900^\circ$ |                 |

**Practice B**

- |                 |                 |
|-----------------|-----------------|
| 1. $55^\circ$   | 2. $136^\circ$  |
| 3. $74^\circ$   | 4. $56^\circ$   |
| 5. $115^\circ$  | 6. $93^\circ$   |
| 7. 1,080°       | 8. $360^\circ$  |
| 9. $540^\circ$  | 10. $360^\circ$ |
| 11. $720^\circ$ | 12. 1,440°      |
| 13. 1,080°      |                 |

**Practice C**

- |                        |                         |
|------------------------|-------------------------|
| 1. $16^\circ$          | 2. $40^\circ$           |
| 3. $112^\circ$         | 4. $66^\circ$           |
| 5. $81^\circ$          | 6. $42^\circ$           |
| 7. 1,440°              | 8. $720^\circ$          |
| 9. 1,620°              | 10. $47^\circ$ ; obtuse |
| 11. $78^\circ$ ; right | 12. $70^\circ$ ; acute  |
| 13. $60^\circ$         |                         |

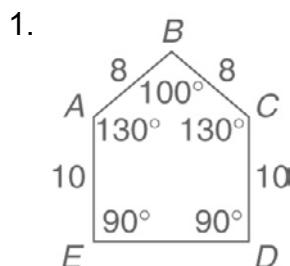
**Review for Mastery**

- |                    |                    |
|--------------------|--------------------|
| 1. $180^\circ$     | 2. $180^\circ$     |
| 3. $49^\circ$      | 4. $103^\circ$     |
| 5. $68^\circ$      | 6. $82^\circ$      |
| 7. 2               | 8. 3               |
| 9. 4               | 10. two            |
| 11. 2; $360^\circ$ | 12. 4; $720^\circ$ |
| 13. 3; $540^\circ$ |                    |

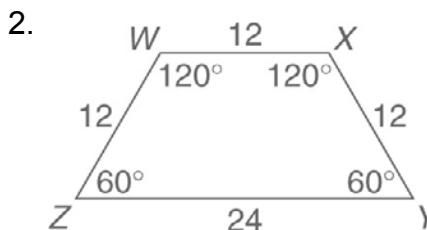
**Challenge**

Answers may vary.

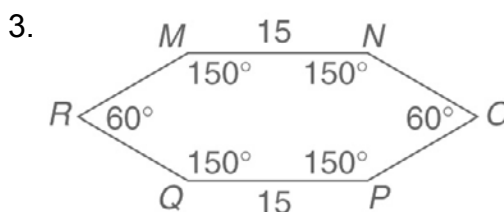
Possible answers are given.



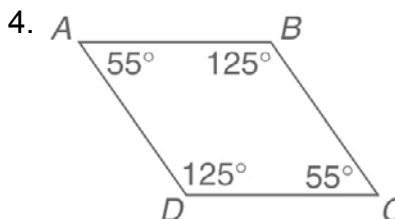
pentagon



trapezoid



hexagon



rhombus