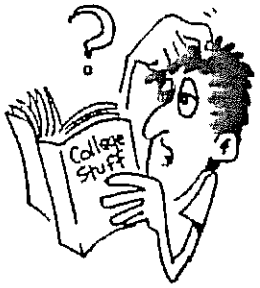
Name: _____ Period: _____



Find each answer in the Code Key and notice the letter below it. Write this letter in the box at the bottom of the page containing the exercise number.

In Exercises 1-8, write *true* or *false* next to the statement. If the statement is false, explain why.

_____**1.** $\angle 1$ and $\angle 4$ are corresponding angles.

_____**2.** $\angle 1$ and $\angle 4$ are congruent.

_____**3.** $\angle 4$ and $\angle 7$ are corresponding angles.

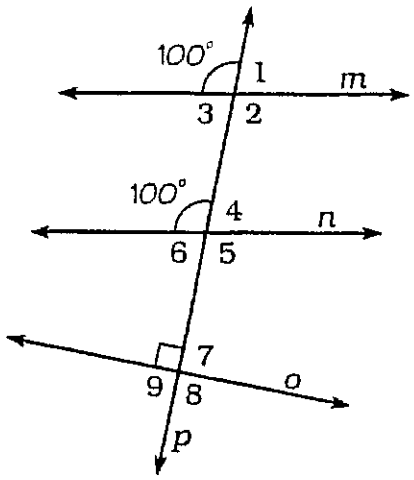
_____**4.** $\angle 4$ and $\angle 7$ are congruent.

_____**5.** $\angle 1$, $\angle 3$, $\angle 4$, and $\angle 6$ all measure 80°.

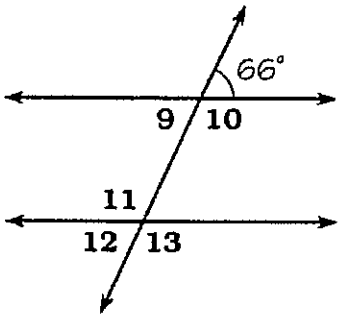
_____**6.** $\angle 2$, $\angle 5$, and $\angle 8$ all measure 100°.

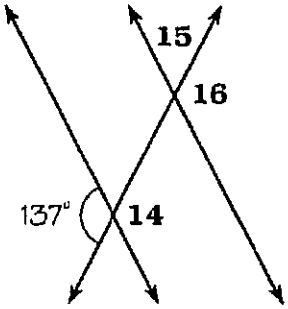
_____**7.** Lines m, n, and o are parallel.

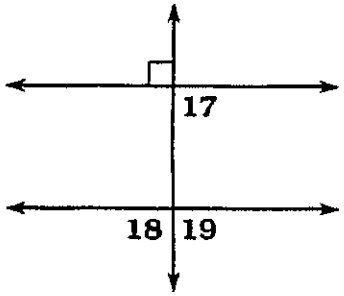
_____**8.** Lines o and p are perpendicular.

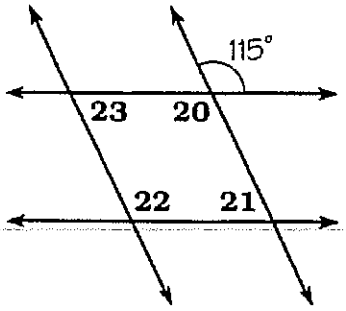


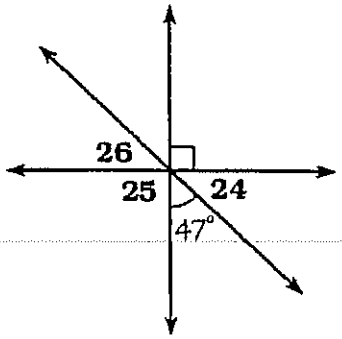
In Exercises 9-30, find the measure of the angle. (The angle number is the exercise number.) Assume that lines in each figure that do not interect are parallel.

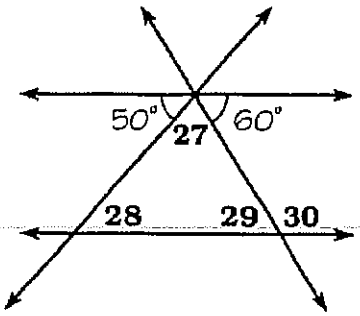






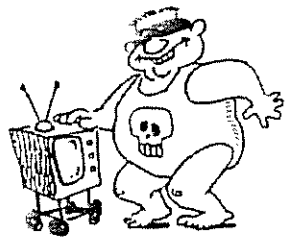




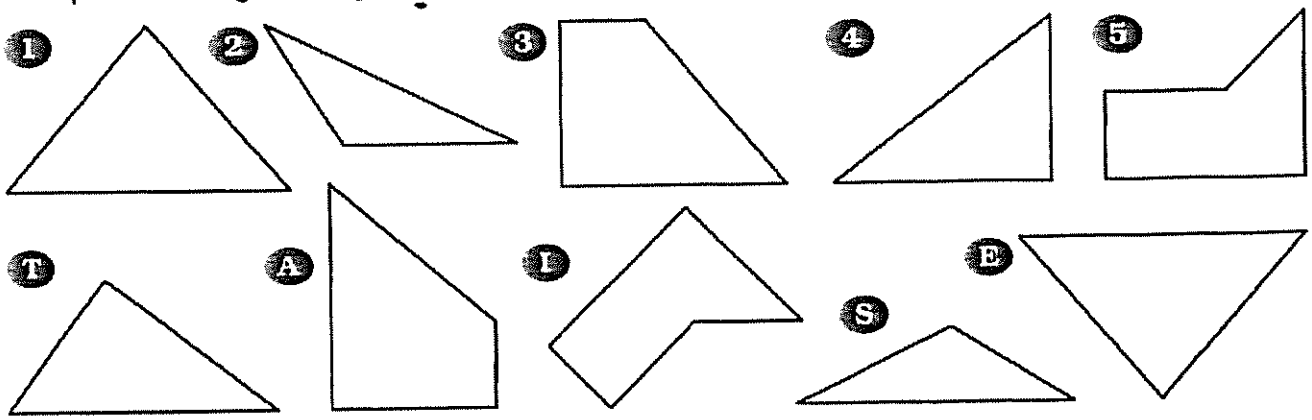


CODE KEY	true	false	43°	50°	60°	65°	66°	70°	90°	114°	115°	120°	137°
	N	E	S	T	B	C	A	D	I	L	G	F	H

28	16	6	23	11	9	26	15	21	12	10	13	4	27	29	7	20	25	5	1	18	3	22	30	17	2	8	19	24	14

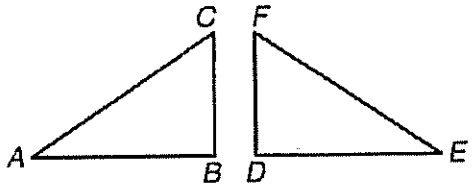


Find pairs of congruent figures. Use the number from one figure and the letter from the other.



Complete each statement. Use the number of the exercise and the letter of the answer.

$\triangle ABC \cong \triangle EDF$

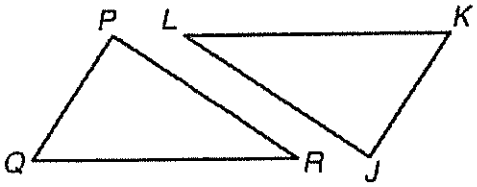


6. $\overline{AC} \cong$
7. $\angle B \cong$
8. $\overline{AB} \cong$
9. $\angle C \cong$

Answers 6-9

O $\overline{DE}$	T $\angle D$
E $\overline{EF}$	G $\angle E$
L $\overline{FD}$	E $\angle F$

$\triangle PQR \cong \triangle JKL$

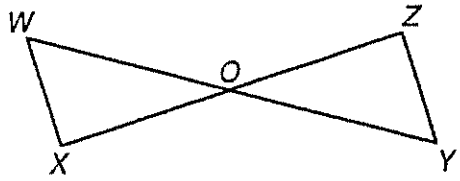


10. $\overline{PR} \cong$
11. $\angle R \cong$
12. $\overline{QR} \cong$
13. $\angle P \cong$

Answers 10-13

Y $\overline{JK}$	H $\angle J$
D $\overline{KL}$	F $\angle K$
T $\overline{LJ}$	E $\angle L$

$\triangle XOW \cong \triangle ZOY$

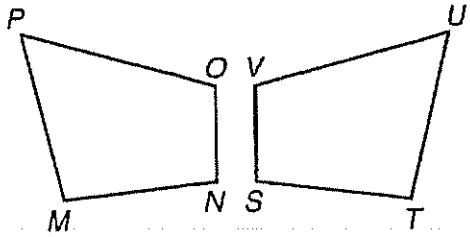


14. $\overline{WO} \cong$
15. $\angle W \cong$
16. $\overline{WX} \cong$
17. $\angle WOX \cong$

Answers 14-17

E $\overline{YZ}$	J $\angle Y$
X $\overline{ZO}$	S $\angle Z$
R $\overline{OY}$	B $\angle ZOY$

$MNOP \cong TSVU$



18. $\overline{OP} \cong$
19. $\angle O \cong$
20. $\overline{MN} \cong$
21. $\angle M \cong$
22. $\overline{PM} \cong$
23. $\angle P \cong$

Answers 18-23

U $\overline{ST}$	O $\angle S$
F $\overline{TU}$	S $\angle T$
N $\overline{UV}$	V $\angle U$
T $\overline{VS}$	C $\angle V$

O	15	20	2	10	17	6	22	8	14	11	4	13	1	21	16	7	19	3	23	9	12	5	18

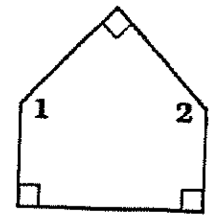
E	37°
R	47°
E	55°
K	56°
O	58°
H	60°
O	61°
L	64°
C	67°
A	69°
G	77°
N	90°
I	95°
B	103°
P	106°
O	108°
T	109°
I	110°
H	113°
C	115°
O	124°
S	125°
I	127°
T	128°
O	135°
N	144°
A	145°
C	156°
E	540°
H	1080°
T	3240°

Cross out the letter next to each correct answer. When you finish, the answer to the title question will remain.

Find the sum of the measures of the angles of each polygon.

1. pentagon
2. octagon
3. 20-gon

4. In the diagram of home plate at the right, ∠1 ≅ ∠2. Find m∠1.



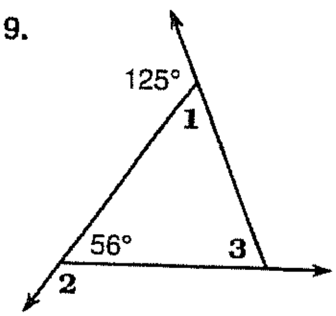
5. The measures of five angles of a hexagon are 135°, 147°, 103°, 90°, and 118°. Find the measure of the sixth angle.

Find the measure of each interior angle of the given regular polygon.

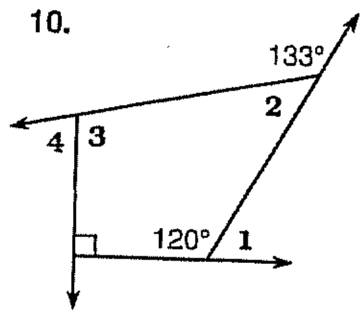
6. regular pentagon
7. regular decagon
8. regular 15-gon

Find the measures of the numbered angles in each figure.

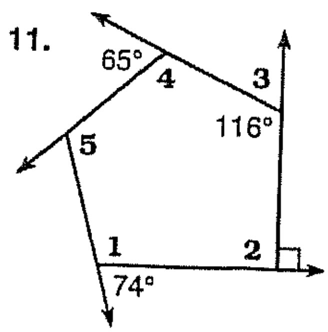
9.



10.

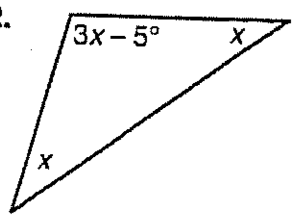


11.



Use an algebraic equation to find the measure of the angle labeled *x*.

12.



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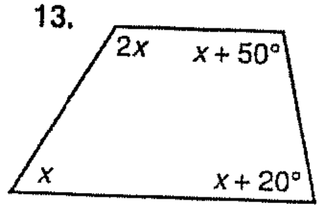

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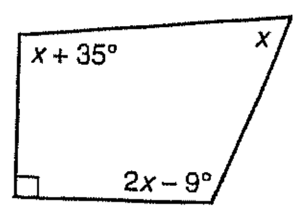
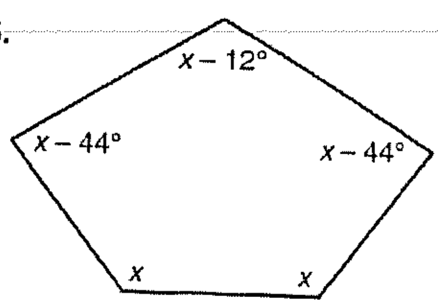


15.



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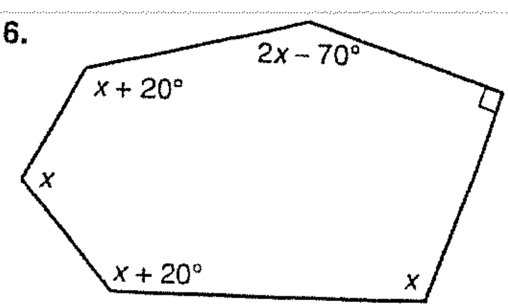

Number Challenge!

Directions: Use the numbers 0 – 9 in the blanks to make the equations true.

You may only use each number once!!

only once!

1. $10 \div \square + \square - 3 = 1$

2. $\square \div 3 + 7 - \square = 6$

3. $16 \div 2 + \square - 6 = \square$

4. $12 \div \square + 3 - 5 = \square$

5. $\square \div 4 + 9 - \square = 4$