**Directions:** For each figure below bubble "A" if the angles are complementary but NOT adjacent, "B" if they are complementary AND adjacent, "C" if they are supplementary but NOT adjacent, or "D" if they are a linear pair (supplementary AND adjacent).
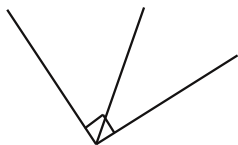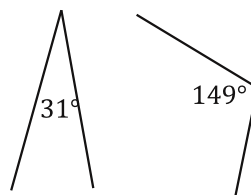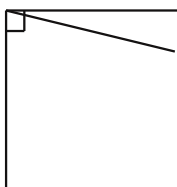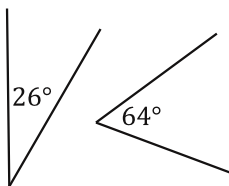
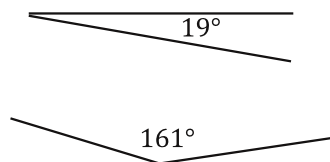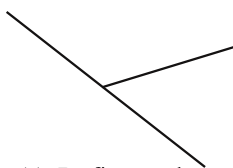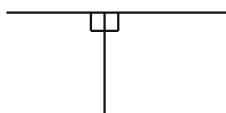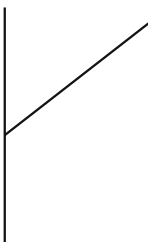If you need help refer to all the lovely text you skipped on the previous page. j/k

1.

2.

53°

127°

3.

4.

26°

64°

5.

6.

31°

149°

7.

8.

9.

19°

161°

11. Define each.

10.

Complementary Angles: _____

_____

Supplementary Angles: _____

_____

Linear Pair: _____

89

Bubble the correct answer choice from each item above.

| #1. | #2. | #3. | #4. | #5. | #6. | #7. | #8. | #9. | #10. |
|---|---|---|---|---|---|---|---|---|---|
| ○ A. | ○ A. | ○ A. | ○ A. | ○ A. | ○ A. | ○ A. | ○ A. | ○ A. | ○ A. |
| ○ B. | ○ B. | ○ B. | ○ B. | ○ B. | ○ B. | ○ B. | ○ B. | ○ B. | ○ B. |
| ○ C. | ○ C. | ○ C. | ○ C. | ○ C. | ○ C. | ○ C. | ○ C. | ○ C. | ○ C. |
| ○ D. | ○ D. | ○ D. | ○ D. | ○ D. | ○ D. | ○ D. | ○ D. | ○ D. | ○ D. |
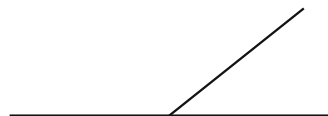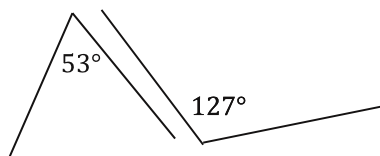
For each, find the measure of the missing angle.

**12.**  Step 1. Write the formula.

$$x + 33° = 90°$$

Step 2. Solve.

$$x + 33° = 90°$$
$$-33° \quad -33°$$
$$x = 57°$$

Yep, it's that easy!

**13.**

Step 1. Write the formula.

Step 2. Solve.

y \ 134°

**14.** Don't forget to keep writing all the steps!

67°
z

**15.**

64°
x

**16.**

y \ 44°

**17.**

z

**18.**

12°

x

**19.**

x / 64°
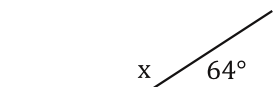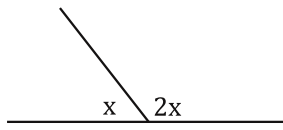
90
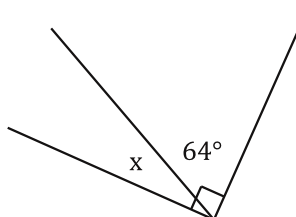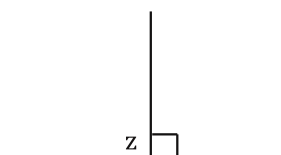
Bubble all the correct answers from above.  Don't bubble incorrect answers.

○78°  ○136°  ○45°  ○113°  ○57°  ○46°  ○116°  ○26°  ○23°  ○102°  ○0°  ○46°  ○154°  ○90°
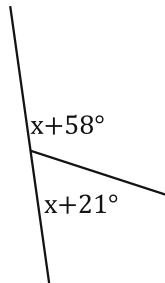
For each find the value of the variable. Show all work.

**20.**



$$x+2x=180°$$
$$\underline{3x=180°}$$
$$3 \qquad 3$$
$$x=60°$$

**21.**



x

3x+18°

**22.**



x+58°

x+21°

**23.**



2x+8°

x-24°
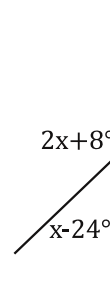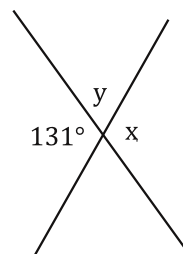
**24.**



x-12°

x+15°
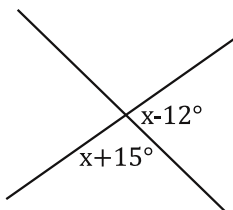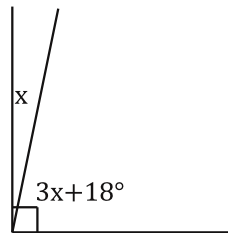
**25.** Find y, then find x...

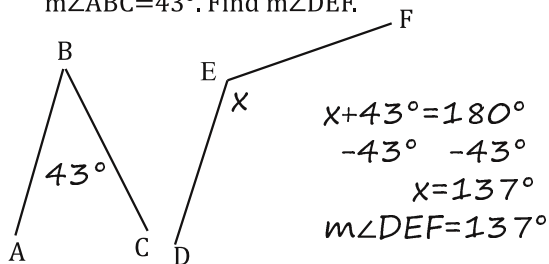

y

131°   x

**26.** What do you notice about the value of x in #25?

91

---

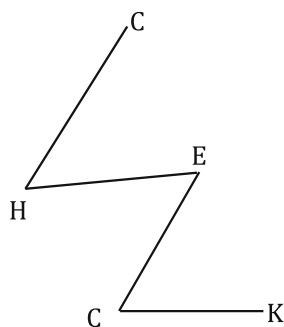Bubble all the correct answers from above.  Don't bubble incorrect answers.

○40.5°   ○ 60°   ○ 50.5°   ○ 18°   ○ 65.3°   ○88.5°   ○49°   ○49.3°   ○131°   ○76.5°

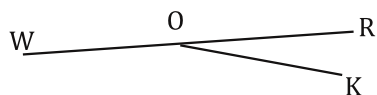Find the indicated angle measure. If the problem contains a linear pair, write "linear pair" as well.

27. ∠ABC is supplementary to ∠DEF
m∠ABC=43°. Find m∠DEF.

F
B
E
X
43°
$X+43°=180°$
$-43° \quad -43°$
$X=137°$
$m∠DEF=137°$
A
C D

28. m∠QRT=143°. Find m∠TSR.

T
Q          R          S

29. ∠H is complementary to ∠C  m∠C=59°. Find m∠H.

C
E
H
C                    K

30. ∠O is supplementary to ∠U,  m∠U=78°. Find m∠O.

Y
O
R
U

31. m∠WOK is 27 more than m∠ROK. Find m∠ROK.

O          R
W
K
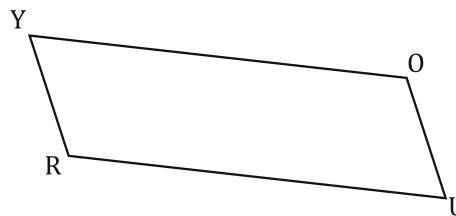
32. m∠XYZ is 11 more than two times m∠WYX. Find m∠XYZ.

X
W                              Z
Y
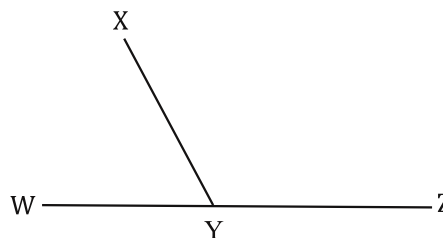
92  33. Secret Message: _____

Bubble all the correct answers from above.  Don't bubble incorrect answers.

○47°    ○121°    ○76.5°    ○153°    ○56.3°    ○84.5°    ○31 °    ○137°    ○37°    ○102°