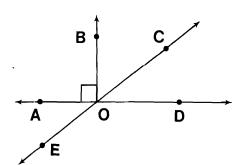
### Some Extra Euclidian Fun

### Why is a Leaky Faucet Like a Race Horse?

TO ANSWER THE IMPORTANT QUESTION ABOVE:

Complete any statement below with one of the answers given at the bottom of the page. Then write the letter of the statement above its correct answer. KEEP WORKING AND YOU WILL DISCOVER THE ANSWER.



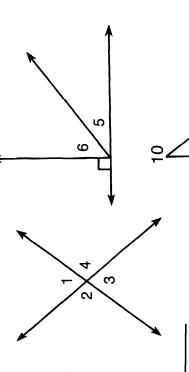
| A          | The figure formed by two rays with the same endpoint is an                       |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
|------------|--|----------|-----|-----|----------|-------|-------|-------|-------|-------|-----------|---------------|-----|--------|---------------|---|
| 1          | The basic unit by which angles are measured is the                               |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| N          | The intersection of the two sides of an angle is called the angle's              |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| 0          | The small box at the vertex of $\angle AOB$ indicates that $\angle AOB$ measures |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| $\bigcirc$ | An angle with a measure of 90° is called a angle.                                |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| $\odot$    | Point C is in the of ∠BOD.   |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| N          | An angle whose measure is between 90° and 180° is an angle.                      |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| G          | Two angles whose measures have a sum of 90° are angles.                          |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| T          | -  |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| _          |  |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| <b>(D)</b> | An angle whose measure is between 0° and 90° is an angle.                        |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| Ē          | )∠AOE and are supplementary angles.  |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| 1          |  |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| N          | Two angles having the same measure are said to be                                |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| _          | E) ∠COD and ∠AOE are congruent because they are angles.                          |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
| <b>R</b>   | R The two rays that form an angle are called the of the angle.                   |          |     |     |          |       |       |       |       |       |           |               |     |        |               |   |
|            |  |          |     |     |          |       |       |       |       |       |           |               |     |        |               | ı |
| ш          | <del> </del>   | <u>«</u> | 0   |     | ,        | 111   | 111   | 111   | (0    |       |           | 3.4           |     |        | \<br>}        |   |
| DEGREE     | ADJACENT   | RIOF     | .06 | EOD | VERTICAL | ANGLE | BTUSE | ACUTE | SIDES | RIGHT | IENJ      | TAF           | ВОС | VERTEX | VTAF          |   |
| DEG        | JAC  | INTERIO  |     |     | ERT      | A     | OBT   | AC    | S     | æ     | GRL       | ME            | 7   | VEF    | ME            |   |
|            | AE   |          |     |     | >        |       |       |       |       |       | CONGRUENT | SUPPLEMENTARY |     |        | SOMPLEMENTARY |   |
|            |  |          |     |     |          |       |       |       |       |       | )         | SUF           |     |        | 30 N          |   |

## **Cryptic Quiz**

O DECODE THE ANSWERS TO THESE TWO QUESTIONS:

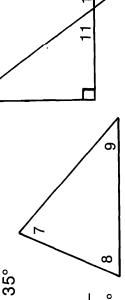
Figure out the measure of the unknown angle in any exercise. Then find this measure in the code. Each time it appears, write the letter of that exercise above it. Keep working and you will decode both answers.

WHAT IS ROUND AND VERY DANGEROUS?



112° 62° 120° 40° 120° 53° 45° 76° 40° 120° 104° 40° 54°

2. WHAT HAS FIFTY LEGS BUT CAN'T WALK?



65° 112° 54° 60° 112° 40° 35° 119° 127° 120° 74° 35° 43° 35°

(a) IF m $\angle 7 = 73^{\circ}$  AND m $\angle 8 = 64^{\circ}$ , THEN m $\angle 9 = 10^{\circ}$  $\bigcirc$  IF m $\angle$ 8 = 57° AND m $\angle$ 9 = 49°, THEN m $\angle$ 7

11

 $\|$ 

H IF m $\angle$ 7 = 80° AND m $\angle$ 9 = 35°, THEN m $\angle$ 8

 $\bigcirc$  IF m $\angle$ 10 = 28°, THEN m $\angle$ 11 =

**(E)** IF m $\angle 11 = 55^{\circ}$ , THEN m $\angle 10 =$ 

 $\oplus$  IF m $\angle$ 11 = 53°, THEN m $\angle$ 13 =

 $\bigcirc$  IF m $\angle 5=36^\circ$ , THEN m $\angle 6=$ 

U IF m $\angle$ 6 = 45°, THEN m $\angle$ 5 =

 $\odot$  IF m $\angle$ 11 = 53°, THEN m $\angle$ 12 =

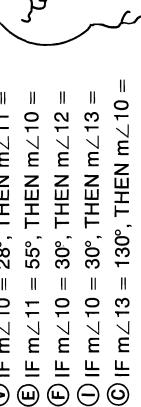
 $m (\red N \ IF \ m \angle 3 = 61^\circ, THEN \ m \angle 4 =$ 

(A) IF m $\angle 2 = 112^{\circ}$ , THEN m $\angle 4 =$ 

(S) IF m $\angle 1$  = 76°, THEN m $\angle 3$  =

 $(\mathbf{R})$  IF m $\angle 1 = 76^{\circ}$ , THEN m $\angle 2 =$ 

(I) IF m $\angle$  10 = 30°, THEN m $\angle$  13 =



### **Daffynition Decoder**

TO DECODE THESE THREE DAFFYNITIONS, FOLLOW THESE DIRECTIONS:

Figure out the measure of the unknown angle in any exercise. Then find this measure in the code. Each time it appears, write the letter of that exercise above it.

KEEP WORKING AND YOU WILL DECODE THE THREE DE-FUN-ITIONS.

### **RAINCOAT:**

| 40° | 80° | 132° | 35° | 95° | 90° | 48° | 66° | 90° | 36° | 48° |
|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|

### PASTEURIZE:

| 40° | 130° | 130° | 105° | 36° | 48° | 40° | 130° | 30° | 90° | 90° |
|-----|------|------|------|-----|-----|-----|------|-----|-----|-----|



$$\bigcirc$$
 IF m $\angle$ 1 = 48°, THEN m $\angle$ 4 =

$$\bigcirc$$
 IF m $\angle$ 6 = 40°, THEN m $\angle$ 5 =

$$\bigcirc$$
 IF m $\angle$ 7 = 54°, THEN m $\angle$ 8 =

$$\bigcirc$$
 IF m $\angle$ 7 = 59°, THEN m $\angle$ 6 =

① IF m
$$\angle$$
5 = 57°, THEN m $\angle$ 8 =

① IF 
$$m \angle 3 = 50^{\circ}$$
, THEN  $m \angle 9 =$ 

$$\bigcirc$$
 IF m $\angle$ 12 = 120°, THEN m $\angle$ 3 =

$$oxplus$$
 IF m $\angle$ 7 = 55° AND m $\angle$ 9 = 45°, THEN m $\angle$ 15 =

$$\bigcirc N$$
 IF m $\angle 3 = 46^{\circ}$  AND m $\angle 14 = 99^{\circ}$ , THEN m $\angle 8 = 10^{\circ}$ 

$$\textcircled{W}$$
 IF m $\angle 9 = 29^{\circ}$  AND m $\angle 15 = 85^{\circ}$ , THEN m $\angle 7 =$ 

$$\bigcirc$$
 IF m $\angle$ 8 = 37° AND m $\angle$ 3 = 38°, THEN m $\angle$ 14 =

$$\bigcirc$$
 IF m $\angle$ 7 = 40° AND m $\angle$ 15 = 90°, THEN m $\angle$ 12 =

$$\bigcirc$$
 IF m $\angle$ 3 = 35° AND m $\angle$ 16 = 90°, THEN m $\angle$ 8 =

$$\bigcirc$$
 IF m\( 28 = 40° AND m\( 212 = 140°, THEN m\( 215 = 140°, THEN m\( 2

① IF 
$$m \angle 7 = 55^{\circ}$$
 AND  $m \angle 1 = 50^{\circ}$ , THEN  $m \angle 16 =$ \_\_\_\_

# HOW DO BULLDOGS GET FLAT NOSES?

DIRECTIONS: Measure any angle below and find your answer in one of the boxes at the bottom. Write the vertex letter of the angle in the box. Keep working and you will discover the answer to the title question.

