$\qquad$
Date: $\qquad$ Period: $\qquad$

## Why does Batman brush his teeth so oiten?

Solve each problem below. Find your answer in the answer column and notice the letter next to it. Write this letter in each box that contains the number of that problem. Keep working and you will discover the answer to the title question.

1. Find the value of $x$ and $y$.

2. Find the value of $x$.

3. Please classify the triangle by its side lengths and its angle measures.

4. Please find $m \angle 1, m \angle 2, m \angle 3$.

5. In $\triangle A B C, m \angle A=(2 x+1)^{\circ}, m \angle B=(5 x+5)^{\circ}$ and $m \angle C=(7 x+6)^{\circ}$. Please find the measures of the angles and classify the triangle by its angles.
6. Please find $m \angle B$

7. The lengths of the sides of an equilateral triangle are $6 x, 10 x-24$, and $2 x+24$. Please find the perimeter of the triangle.
(K) 65
(O) $25,65,90$, right
(R) 108
(1) 6
(N) 48,70
(1I) 4,59
(H) Isosceles
obtuse
(B) 85
(P) 54
(G) $36,72,108$
(E) $79,51,39$
(L) 21
(V) 8,34
(A) 40
(S) 26
(T) Isosceles right
(II) $65,25,90$,acute
if the triangle is a right triangle. Use the coordinate plane on the back side and make sure you show your work ; $A(2,3), B(4,7), C(6,1)$

