Naming Angles

Mathematics is the art of giving different names to the same thing.

A section on naming angles is very important because many students really never get this down. The reason is because there are too many options. These options are necessary because as diagrams become more complicated naming angles becomes more confusing. Before we look at how to name angles we need to talk about your vertices.

A Vertex (plural is vertices) is simply where two segments or rays meet to form the angle.

Naming option one: The one point name. Simply draw the angle symbol, $\angle$, and state the name of the angles vertex.

Naming option two: The three point name. The one point name really falls apart when you have a diagram like this...

How would you name this angle? $\angle E$? How would you tell which ONE angle had a vertex $E$? There are actually like $12 \angle E$'s here...

Because this angle shares vertex $E$ with several other angles we must use the three point name like this... $\angle B E C$...or this... $\angle C E B$. We can use either one, but the vertex $E$ MUST BE IN THE MIDDLE OF THE NAME. Inscribe that on stone tablets and carry it around your neck so you don’t forget... you can’t call it $\angle E B C$ or $\angle B C E$ or $\angle E C B$ or $\angle C B E$, because the $E$ is not in the middle.

Ex. Name all the angles in the figure...

The third way, and probably the simplest, is just using a number in the angle and calling the angle by that number. This is impractical though when you need to write a measurement there. Be careful... the number will never have a degree symbol. A measurement will.
Bubble in the choice that could NOT be a name for the angle...

1. A. \( \angle B \)  
   B. \( \angle ABC \)  
   C. \( \angle ACB \)  
   D. \( \angle 1 \)

2. A. \( \angle 2 \)  
   B. \( \angle YUO \)  
   C. \( \angle YOU \)  
   D. \( \angle UOY \)

3. A. \( \angle CNA \)  
   B. \( \angle 3 \)  
   C. \( \angle NAC \)  
   D. \( \angle CAN \)

4. A. \( \angle E \)  
   B. \( \angle GET \)  
   C. \( \angle TEG \)  
   D. \( \angle TGE \)

5. A. \( \angle B \)  
   B. \( \angle CAB \)  
   C. \( \angle ABC \)  
   D. \( \angle 5 \)

6. A. \( \angle DFG \)  
   B. \( \angle 6 \)  
   C. \( \angle G \)  
   D. \( \angle DGF \)

7. A. \( \angle 7 \)  
   B. \( \angle H \)  
   C. \( \angle THI \)  
   D. \( \angle IHT \)

8. A. \( \angle 9 \)  
   B. \( \angle SUJ \)  
   C. \( \angle JUS \)  
   D. \( \angle U \)

9. A. \( \angle O \)  
   B. \( \angle KOR \)  
   C. \( \angle ROK \)  
   D. \( \angle 12 \)

10. A. \( \angle ARH \)  
    B. \( \angle 13 \)  
    C. \( \angle HRA \)  
    D. \( \angle R \)

Bubble the correct answer choice from each item above.

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Write another name for...

11. $\angle 1$

12. $\angle 2$

13. $\angle 3$

14. $\angle 4$

15. $\angle 5$

16. $\angle 6$

17. $\angle 7$

18. $\angle 8$

19. $\angle 9$

20. $\angle 10$

21. $\angle 11$

22. $\angle 12$
23. The angle marked with the arc.

24. $\angle 1$

25. $\angle 2$

26. The angle marked with the arc.

27. The angle marked with the arc.

28. $\angle 3$

29. The angle marked with the arc.

30. The angle marked with the arc.

31. The angle marked with the arc.

32. The angle marked with the arc.

33. $\angle 4$

34. $\angle 5$