

Q4C2 Geometric Measurement Study Guide

Name: _____

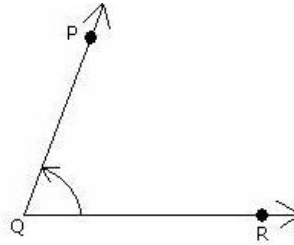
1. An angle that measures 65° is a(n) _____ angle. (right, straight, acute, obtuse)

2. An angle that measures 164° is a(n) _____ angle. (right, straight, acute, obtuse)

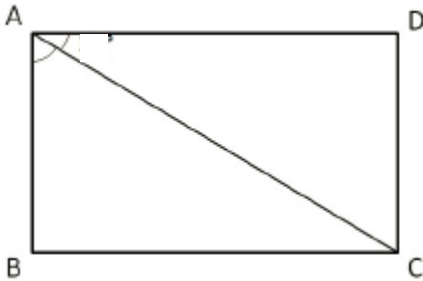
3. A straight angle measures _____ $^\circ$. A right angle measures _____ $^\circ$.

4. Which way is not a way to name this angle?

- A. $\angle QRP$ B. $\angle Q$ C. $\angle PQR$ D. $\angle RQP$



5. Figure ABCD is a rectangle and $\angle CAD$ measures 49° . What is the measure of $\angle BAC$?



6. Two angles form a right angle. One angle measures 52° . What is the measure of the other angle? Is it obtuse, acute, right, or straight? Draw the angle to defend your thinking.

7. Two angles form a straight angle. One angle measures 71° . What is the measure of the other angle? Is it obtuse, acute, right, or straight? Draw the angle to defend your thinking.

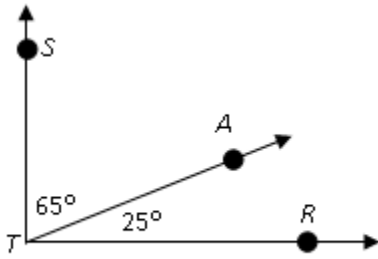
8. If an angle measures 93° , through what fraction of a circle does the angle turn? _____

9. If an angle measures 116° , through what fraction of a circle does the angle turn? _____

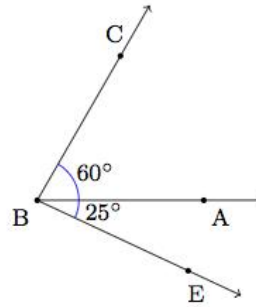
10. How many degrees are in an angle that turns through $\frac{1}{8}$ of a circle? _____

11. How many degrees are in an angle that turns through $\frac{1}{12}$ of a circle? _____

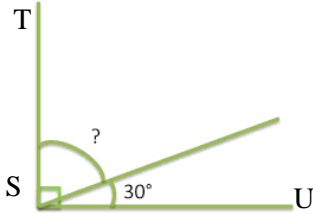
12. What is the measure of $\angle STR$?



13. What is the measure of $\angle CBE$?

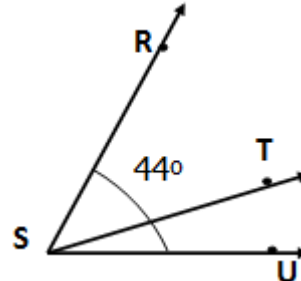


14. What is the measure of the missing angle $\angle TSU$?



Write an equation to show how you found the missing measurement?

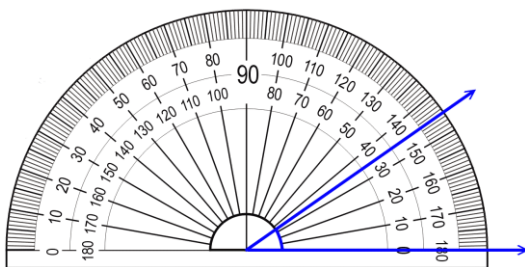
15. If the measure of $\angle RSU$ is 63° , what is the measure of $\angle CBE$?



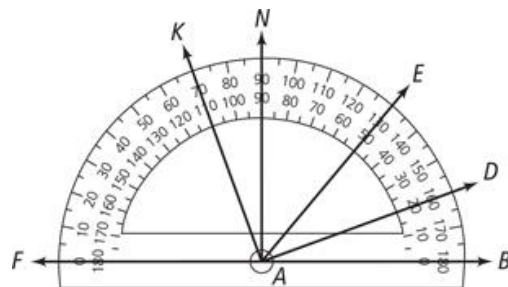
Write an equation to show how you found the missing measurement?

16. When a clock's hands are exactly on the 12 and 1, the angle formed by the clocks hands measures 30° . What is the measure of the angle formed when a clock's hands are exactly on the 12 and 8? _____

17. What is the measure of the angle?

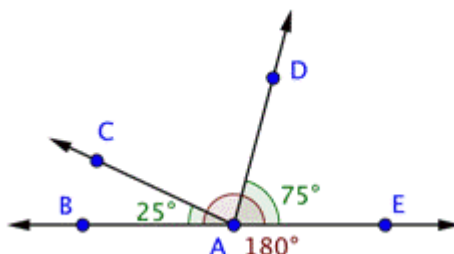


18. What is the measure of $\angle FAK$?



19. Which equation can you use to find the measure of $\angle CAD$?

- A. $180 - (25 + 75)$
- B. $180 - (75 - 25)$
- C. $25 + 75$
- D. $180 - 75$



20. Write the letter of the example/figure next to its definition.

Point

Line segment

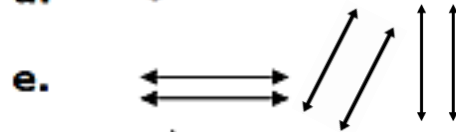
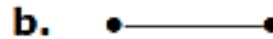
Line

Ray

Parallel lines

Perpendicular lines

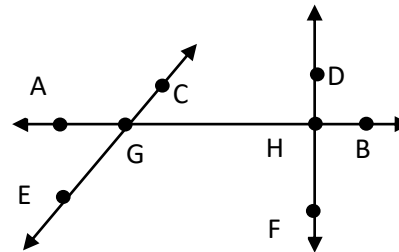
Angle



21. Classify angle AGE (acute, obtuse, right)

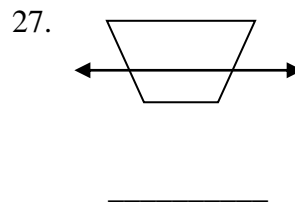
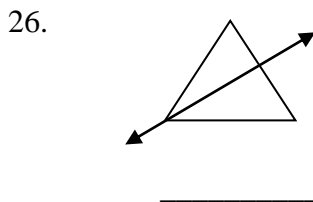
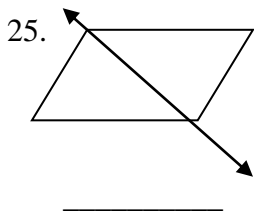
22. Classify angle EGH (acute, obtuse, right)

23. Name a pair of perpendicular lines _____

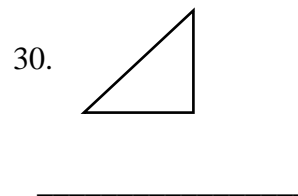
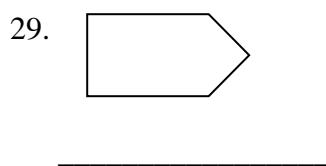
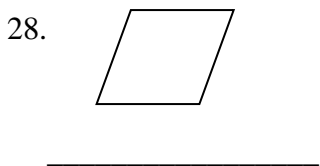


24. Name a ray _____, a line _____, and a line segment _____.

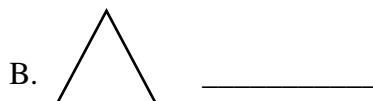
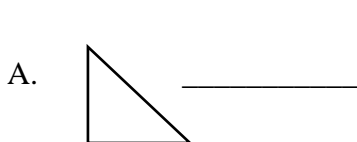
Do the lines appear to be lines of symmetry? Yes or No



Does the shape have parallel lines, perpendicular lines, or both?



31. Describe each triangle according to angles. (acute, obtuse, right)



1. An angle that measures 65° is a(n) _____ angle. (right, straight, **acute**, obtuse)
2. An angle that measures 164° is a(n) _____ angle. (right, straight, acute, **obtuse**)
3. A straight angle measures **180°** . A right angle measures **90°** .
4. Which way is not a way to name this angle?
A. $\angle QRP$ B. $\angle Q$ C. $\angle PQR$ D. $\angle RQP$
5. Figure ABCD is a rectangle and $\angle CAD$ measures 49° . What is the measure of $\angle BAC$? **$90 - 49 = 41^\circ$**
6. Two angles form a right angle. One angle measures 59° . What is the measure of the other angle? Is it obtuse, acute, right, or straight? **$90 - 52 = 38^\circ$ acute**
7. Two angles form a straight angle. One angle measures 109° . What is the measure of the other angle? Is it obtuse, acute, right, or straight? **$180 - 71 = 109^\circ$ acute**
8. If an angle measures 93° , through what fraction of a circle does the angle turn? **$\frac{93}{360}$**
9. If an angle measures 116° , through what fraction of a circle does the angle turn? **$\frac{116}{360}$**
10. How many degrees are in an angle that turns through $\frac{1}{8}$ of a circle? **$360 \div 8 = 45^\circ$**
11. How many degrees are in an angle that turns through $\frac{1}{12}$ of a circle? **$360 \div 12 = 30^\circ$**
12. What is the measure of $\angle STR$? **$65 + 25 = 90^\circ$**
13. What is the measure of $\angle CBE$? **$60 + 25 = 85^\circ$**
14. What is the measure of the missing angle? **$90 - 30 = 60^\circ$**
15. If the measure of $\angle RSU$ is 63° , what is the measure of $\angle TSU$? **$63 - 44 = 19^\circ$**
16. What is the measure of the angle formed when a clock's hands are exactly on the 12 and 8? **Each angle is 30° , so $30 \times 8 = 240^\circ$**
17. What is the measure of the angle? **35°**
18. What is the measure of $\angle FAK$? **70°**
19. Which equation can you use to find the measure of $\angle CAD$? **A. $180 - (25 + 75)$**
20. **point-D line segment-B line-G ray-A parallel lines-E perpendicular lines-F angle-C**
21. Classify angle AGE: **acute**
22. Classify angle EGH: **obtuse**
23. Name a pair of perpendicular lines. **DF and GB**
24. Rays: **HF, GC, GE, GA, HD, HB (rays must be named in the direction of the arrow)**
Lines: **EC, AB, DF, CE, BA, EC (can be named either direction)**
Line segment: **GH, HF, HB, HD, DH, CG, GC...(can be named either direction)**
- Do the lines appear to be lines of symmetry? Yes or no
25. **NO**
26. **YES**
27. **NO**
- Does the shape have parallel lines, perpendicular lines, or both.
28. **Parallel**
29. **Both**
30. **Perpendicular**
31. **A-right, B-acute, C-obtuse**