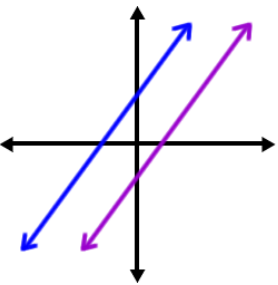
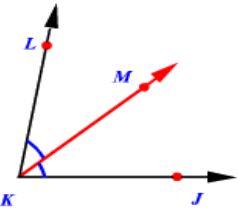
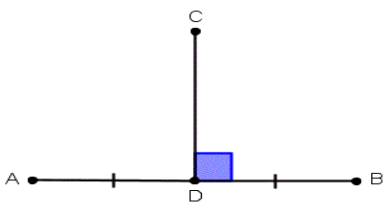
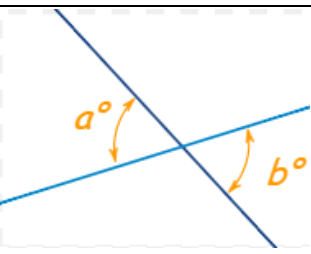
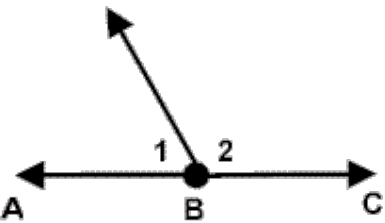
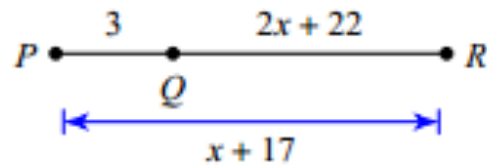


Picture
1. 
2. 
3. 
4. 
5. 
6. $a \perp b$
7. $\overleftrightarrow{AB}$
8. $\overline{EF} \cong \overline{JK}$
9. $\angle ABC$
10. $\bullet A$

Vocabulary
A. Linear Pair
B. Vertical Angles
C. Perpendicular Bisector
D. Parallel Lines
E. Angle Bisector
F. Point
G. Line
H. Angle
I. Perpendicular to
J. Congruent to

For #'s 11-13, choose the correct letter for each justification from the list below. (GCO.A.1)

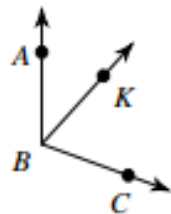
Statements	Reasons
$PQ + QR = PR$	11. _____?
$3 + 2x + 22 = x + 17$	Substitution Property
$2x + 25 = x + 17$	12. _____?
$x + 25 = 17$	Subtraction Property of Equality
$x = -8$	13. _____?



- A. Segment Addition Postulate
 - B. Addition Property of =
 - C. Subtraction Property of =
 - D. Combine Like Terms
 - E. Distributive Property

14. Using the Angle Addition Postulate, solve for x and then find the measure of $\angle ABC$. (GCO.A.1)

$m\angle ABC = 17x + 8$, $m\angle ABK = 42^\circ$,
and $m\angle KBC = 12x - 4$. Find $m\angle ABC$.

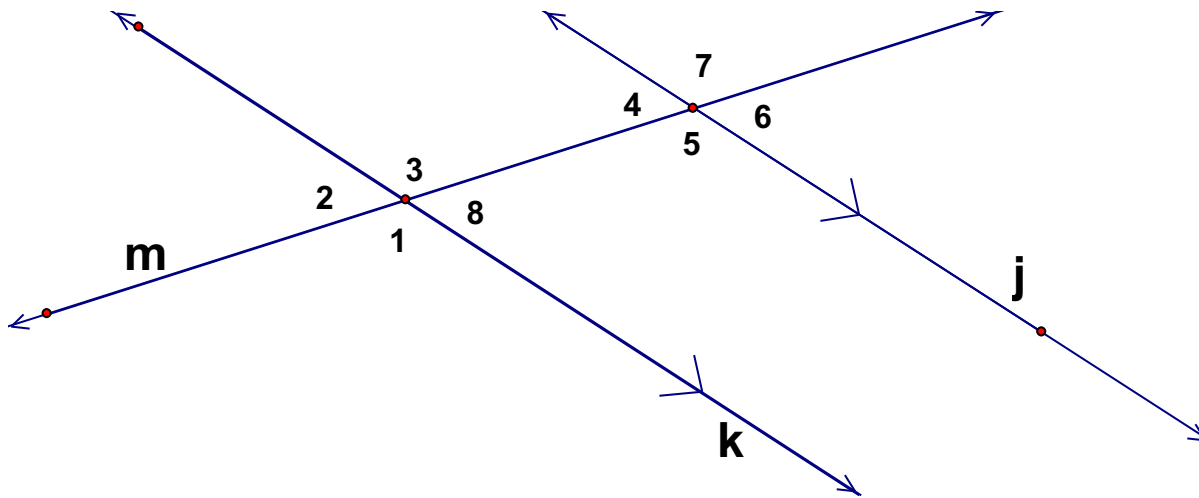


- A. 110° B. 6° C. 42° D. 68°

15. Joey drew a line segment, $\overline{AB}$, on patty paper and then folded it so A fell on top of B. He then put a point on the segment where the crease of the patty paper intersected $\overline{AB}$. What did Joey just find? (G.CO.D.12)

A. Angle bisector	B. Midpoint
C. Ray	D. Parallel Line

In the diagram below, $j \parallel k$. Use that fact to answer the questions below.



For questions 16 - 19, choose from the list of angle pairs below. CHOOSE ALL LETTERS THAT APPLY. (G-CO.C.9)

A. $\angle 1$ and $\angle 3$	B. $\angle 2$ and $\angle 4$	C. $\angle 8$ and $\angle 5$	D. $\angle 5$ and $\angle 3$	E. $\angle 5$ and $\angle 2$
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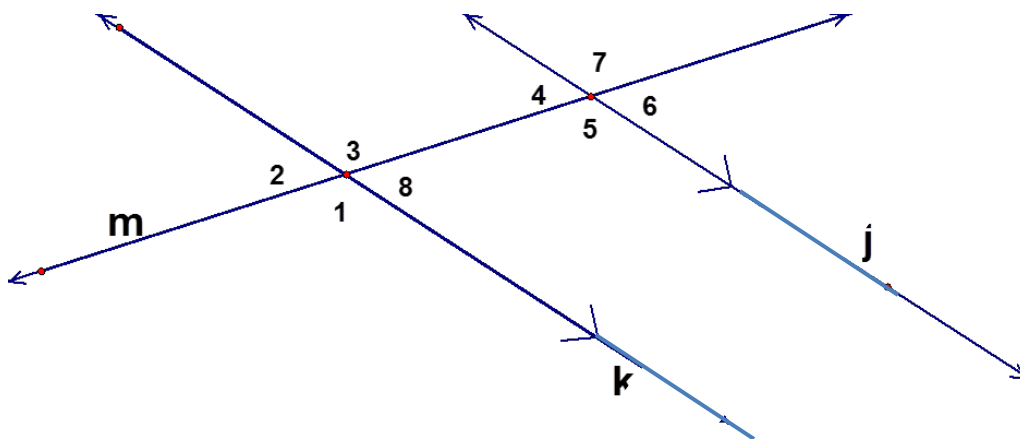
16. Name all the pairs from A – E above that are corresponding angles.

17. Name all the pairs from A – E above that are alternate interior angles.

18. Name all the pairs from A – E above that are same-side interior angles.

19. Name all the pairs from A – E above that are vertical angles.

Use the diagram below for questions 20 and 21. (GCO.A.9)

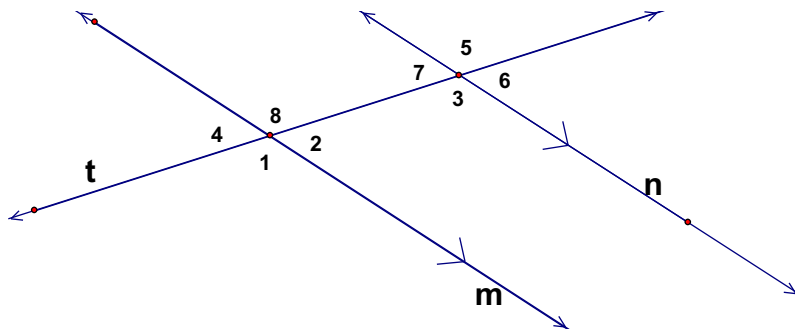


20. Assume that $j \parallel k$. If $m\angle 8 = 2x + 5$ and $m\angle 4 = 3x - 10$, solve for x and choose the correct justification.

- A. $x = 15$ by the Same-side Interior Angles Theorem
- B. $x = 15$ by the Alternate Interior Angles Theorem
- C. $x = 37$ by the Same-side Interior Angles Theorem
- D. $x = 37$ by the Alternate Interior Angles Theorem

21. Assume that $m\angle 1 = 120^\circ$ and $m\angle 6 = 60^\circ$, choose the correct statement.

- A. Yes, the lines are parallel because the Same-side Interior Angles are supplementary.
- B. Yes, the lines are parallel because the Same-side Exterior Angles are supplementary.
- C. No, the lines are not parallel because Corresponding Angles must be congruent.
- D. No, the lines are not parallel because Alternate Exterior Angles must be congruent.



Choose the correct letter for each Justification from the list below. (G-CO.C.9)

Given: $m \parallel n$

Prove: $\angle 1 \cong \angle 5$

Statement	Justification
$m \parallel n$	22. _____ ?
$\angle 8 \cong \angle 5$	23. _____ ?
$\angle 1 \cong \angle 8$	24. _____ ?
$\angle 1 \cong \angle 5$	25. _____ ?

A. Transitive Property of congruence.

B. $\angle 1 \cong \angle 5$

C. Vertical Angles are congruent $\cong$

D. Given

E. Corresponding Angles of parallel lines are congruent

F. Prove

26. Which of the following set of theorems/postulates are valid to prove triangles are congruent? (G-CO.B.8)

A. SAS, SSA, SSS

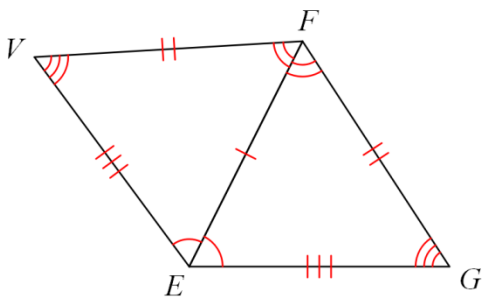
B. SSS, SAS, ASA

C. CAT, DOG, BYE

D. HL, AAA, SSS

E. AA, HL, SS

27. For the picture shown, which of the following congruency statements is correct?



A) $\triangle EFG \cong \triangle EFV$

B) $\triangle GFE \cong \triangle VEF$

C) $\triangle EFG \cong \triangle FEV$

D) $\triangle EGF \cong \triangle EFV$