Complementary

Supplementary

Adjacent

Linear Pair

Vertical

Two or more angles are **Complementary** if the sum of their measures is _____.

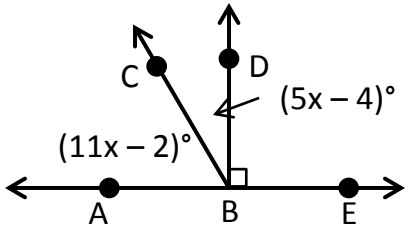
Two or more angles are **Supplementary** if the sum of their measures is _____.

Adjacent Angles are two angles that share a common _____ and _____ , but have no common interior points.

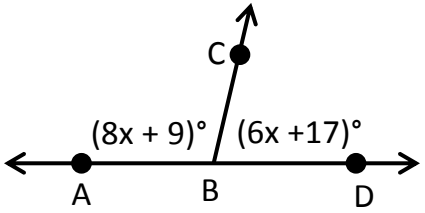
Two adjacent angles are a **Linear Pair** if their noncommon sides are opposite rays.

Two angles are **Vertical Angles** if their sides form two pairs of opposite rays.

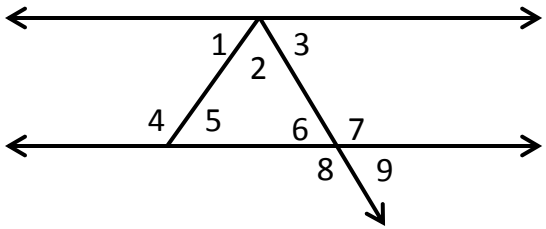
Example 1: Find m∠ABC and m∠ CBD.



Example 2: Find m∠ABC and m∠ CBD.



Example 3: Use the diagram to determine whether the angles are adjacent, vertical, a linear pair, or none of the above.



a) ∠1 and ∠2

b) ∠4 and ∠5

c) ∠7 and ∠9

d) ∠6 and ∠9

e) ∠2 and ∠6

Answer Key!

Complementary

Supplementary

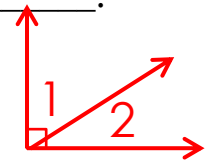
Adjacent

Linear Pair

Vertical

Two or more angles are **Complementary** if the sum of their measures is 90°.

$m\angle 1 + m\angle 2 = 90°$



Two or more angles are **Supplementary** if the sum of their measures is 180°.

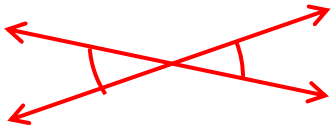
$m\angle 3 + m\angle 4 = 180°$

Adjacent Angles are two angles that share a common vertex and side, but have no common interior points.
("right next to")

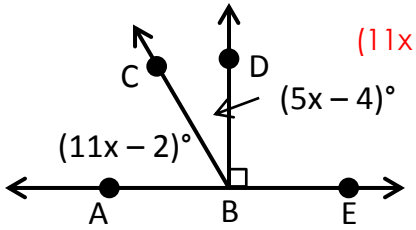
Two adjacent angles are a **Linear Pair** if their noncommon sides are opposite rays.

*Linear pairs are always supplementary

Two angles are **Vertical Angles** if their sides form two pairs of opposite rays.
(opposite angles)
*Vertical Angles are always congruent



Example 1: Find m∠ABC and m∠ CBD.

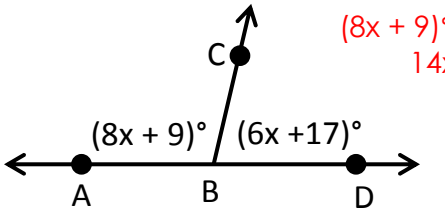


$(11x - 2)° + (5x - 4)° = 90°$
$16x° - 6° = 90°$
$16x° = 96°$
$x = 6$

m∠ABC
11x – 2
11(6) – 2 = 64°

m∠ABC
5x – 4
5(6) – 4 = 26°

Example 2: Find m∠ABC and m∠ CBD.

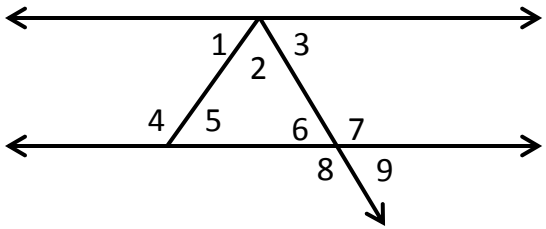


$(8x + 9)° + (6x + 17)° = 180°$
$14x° + 26° = 180°$
$14x° = 154°$
$x = 11$

m∠ABC
8x + 9
8(11) + 9 = 97°

m∠ABC
6x + 17
6(11) + 17 = 83°

Example 3: Use the diagram to determine whether the angles are adjacent, vertical, a linear pair, or none of the above.



a) ∠1 and ∠2 adjacent

b) ∠4 and ∠5 adjacent, linear pair

c) ∠7 and ∠9 adjacent, linear pair

d) ∠6 and ∠9 vertical

e) ∠2 and ∠6 none

Directions

Print pages 1 & 2 front to back (3 & 4 for the answer key). On my printer, I use the option to print double-sided and to flip along the short edge.

Have students fold the page in half and cut along the dotted lines to create 5 tabs.

The final product should look like this: