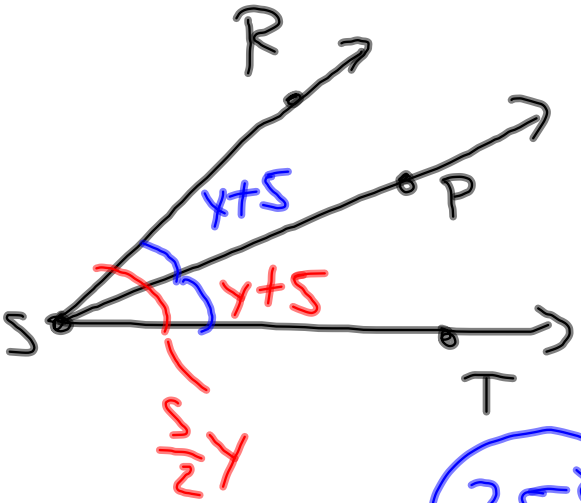
18. $m\angle RSP$ if $m\angle RST = \frac{5}{2}y$ and $m\angle PST = y + 5$



$2y + 10 = \frac{5}{2}y$

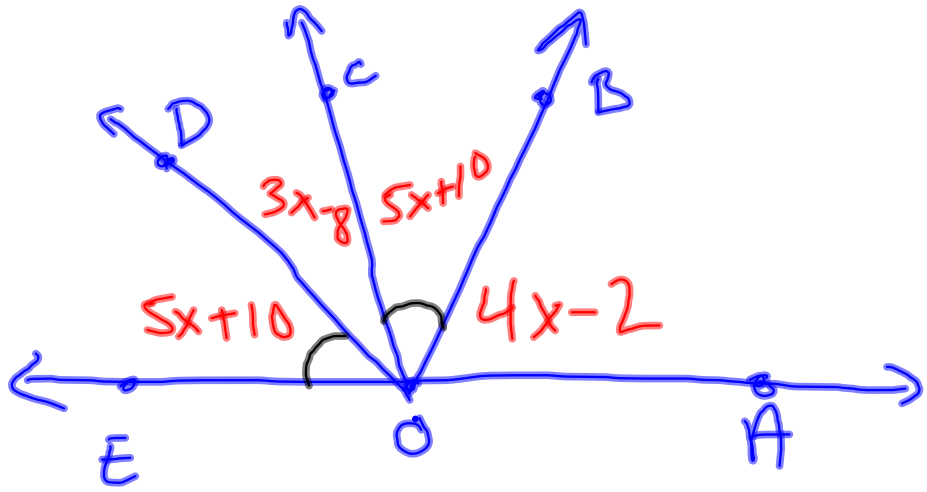
$-2y \quad -2y$

$2 \cdot 10 = \frac{1}{2}y \cdot 2$

$20 = y$

25°

30.



$5x+10+3x-8+5x+10+4x-2=180$

$17x+16=180$

$-10\quad -10$

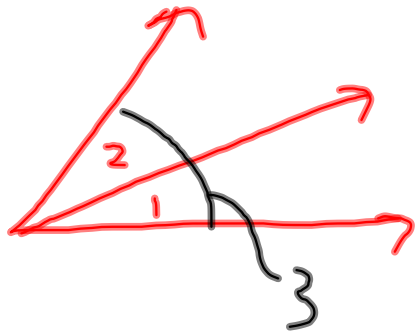
$\frac{17x}{17}=\frac{170}{17}$

$x=10$

0-12 ✗
13-18 ✓
19+ ✗

1.4 Pairs of Angles

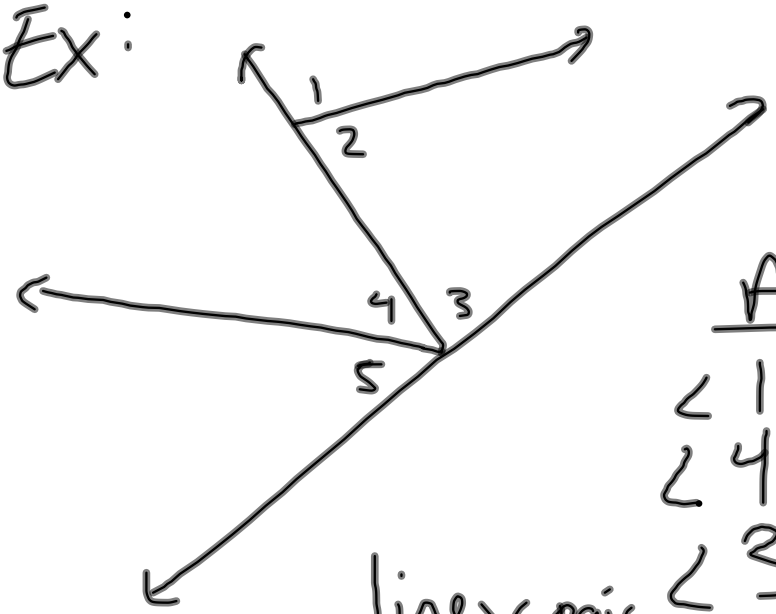
Adjacent Angles: 2 angles with a common vertex and side, but no common interior points.



Linear Pair

adjacent angles that form a line.

Ex:



Adjacent ∠'s

∠1 + ∠2

∠4 + ∠5

∠3 + ∠4

linear pairs

∠1 + ∠2

∠3, ∠4, ∠5

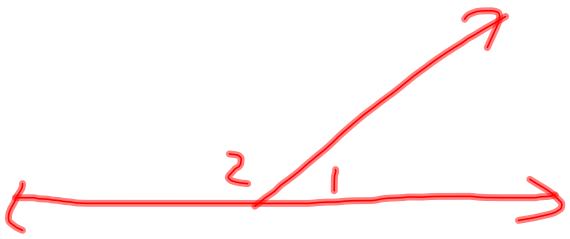
Complimentary angle

∠'s whose measures add up to 90 degrees.

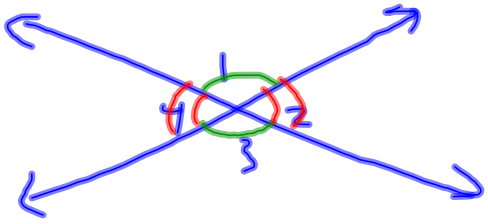
Ex:

Supplementary angles

∠'s whose measure adds to 180°



Vertical angles: 2 nonadjacent angles formed by intersecting lines.

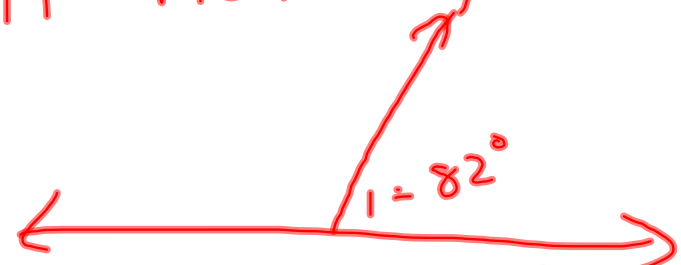


∠1 + ∠3

∠2 + 4

Vertical angles are congruent!

Ex: if $m\angle 1 = 82$, find its supplement



$180 - 82 = 98^\circ$

p. 31

2-8, 12-19, 23-31, 34-37