1) $a = 148^\circ$ $b = 32^\circ$ $c = 148^\circ$ $d = 74^\circ$ $e = 90^\circ$

2) $5x + 18 = 8x - 6$

$24 = 3x$

$8 = x$

$m\angle 13 = 58^\circ$

$m\angle 15 = 58^\circ$

$5y + 22 + 3y - 2 = 180^\circ$

$8y + 20 = 180$

$8y = 160$

$y = 20$

$m\angle 8 = 122$ $m\angle 5 = 58^\circ$

Yes, Corresponding Angles are $\cong$.

3) $\overleftrightarrow{PR} \parallel \overleftrightarrow{QS}$	Given
$\angle 1 \cong \angle 2$	Given
$\angle 2 \cong \angle 3$	Corresponding Angles Thm.
$\angle 1 \cong \angle 3$	Transitive Property
$\overleftrightarrow{PQ} \parallel \overleftrightarrow{RS}$	Alternate Interior Angles Converse.

4) All - A, B, C, D

5) a) $\cong$.

b) supplementary

c) All

6) $60 + 3x + 2y = 180 \rightarrow 3x + 2y = 120$

$80 = 2x - y \rightarrow 2(2x - y = 80)$

$4x - 2y = 160$

$7x = 280$

$x = 40$

$2(40) - y = 80$

$-80 \quad -80$

$-y = 0$

$y = 0$

$(40, 0)$