Examples for pg 3.16

Identify the following properties as substitution, addition, subtraction, multiplication, or division. You may want to refer back to page 3.11.

- 1. If $m \angle 1 + m \angle 3 = 180$ and $m \angle 2 + m \angle 4 = 180$, then $m \angle 1 + m \angle 3 = m \angle 2 + m \angle 4$. Substitution
- 2. If $m \angle 1 = m \angle 3$ and $m \angle 2 = m \angle 4$, then $m \angle 1 + m \angle 2 = m \angle 3 + m \angle 4$.

Addition

Write conclusion, and justify using one of the properties above.

3. If
$$m \angle 3 + m \angle 4 = m \angle 5$$
 and $m \angle 3 = m \angle 4$, then $\frac{m \angle 4 + m \angle 4 = m \angle 5}{2}$. Substitution.

Just ONE step- not solving entire problem!

4. If $m \angle 2 + 90^\circ = 180^\circ$, then $\underline{m \angle 2 = 90^\circ}$ <u>Subtraction</u>