

Name _____ Date _____ Block _____

Fill in the blanks and Identify which property is used in each implication:

- _____ 1. If $12 + 18 = 30$, then $4 + 6 =$ _____
- _____ 2. If $b = 4$, then $8b =$ _____
- _____ 3. If $s = 8$, then $4s = 32$
- _____ 4. If $5x = 20$, then $x =$ _____
- _____ 5. If $a = y$, then $a - 3 = y -$ _____
- _____ 6. If $x = y$, then $-3x =$ _____ y
- _____ 7. If $x = 4, y = 4$, then $x =$ _____
- _____ 8. $3(4 + 5) = 12 +$ _____
- _____ 9. If $a = b$ and $3a = 5$, then 3 _____ $= 5$
- _____ 10. $30 = 30$
- _____ 11. If $a = b$ and $a = 2$, then $b =$ _____
- _____ 12. $(a + b) = (a + b)$
- _____ 13. If $x + y = 20$, then $(x + 4) + (y + 4) = 28$
- _____ 14. If $x = y$, then $x + 5 = y$ _____
- _____ 15. If $x + 9 = y + 9$, then $x =$ _____

Prove completely using two column proof.

Given: $5(2x + 3) = 55$

Prove: $x = 4$

Statements	Reasons
1.	1. Given
2. $10x +$ _____ $= 55$	2.
3. $10x =$ _____	3. SPE
4.	4.
5. $x = 4$	5.