

Reasoning and Proof HW KEY

	<u>Hyp</u>	<u>Conclusion</u>
①	$3x - 7 = 32$	$x = 13$
③	you will	I'll try
⑤	$a + b = a$	$b = 0$
⑦	B is between A and C if and only if $AB + BC = AC$.	

- ⑨ If points are collinear, then they all lie in 1 line.
If pts all lie in 1 line, then they are collinear.

For # 11, 13, 15 - answers can vary.

⑪ $a = 2, b = -1$

⑬ \vec{AB} and \vec{BA} are 2 different rays.

⑮ rectangle 

⑰ T; If $|x| = 6$, then $x = -6$. (F)

⑲ T; If $5b > 20$, then $b > 4$. (T)

⑳ T; If Pam lives in Illinois, then she lives in Chicago. (F)

㉓ T; If $a^2 > 9$, then $a > 3$. (F)

㉕ T; If $n > 5$, then $n > 7$. (F)

㉗ F; If $DE + EF = DF$, then D, E, F are collinear. (T)

㉙ Angles are \cong if and only if their measures are \cong .

㉚ q, not r, s

Back

① (a) If $4n \neq 68$, then $n \neq 17$.

(b) If $n \neq 17$, then $4n \neq 68$.

③ (a) If $x+1$ is odd, then x is even.

(b) If x is even, then $x+1$ is odd.

⑤ If ... LA, then ... CA. (T)

If I don't live in CA, then I don't live in LA. (T)

If I live in CA, then I live in LA. (F)

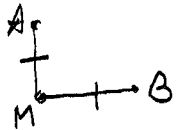
If I don't live in LA, then I don't live in CA. (F)

⑦ If $AM = MB$, then ... (F)

If M is not midpt of \overline{AB} , then $AM \neq MB$. (F)

If M is midpt of \overline{AB} , then $AM = MB$. (T)

If $AM \neq MB$, then M is not midpt of \overline{AB} . (T)



⑨ If ... then (T)

If $n \neq -3$, then $-2n \neq 6$. (T)

If $n > -3$, then $-2n < 6$. (T)

If $-2n \neq 6$, then $n \neq -3$. (T)

⑬ a) It is raining.

b) I am happy.

c) No conclusion.

d) No conclusion

⑮ a) No conclusion

b) are not vertical \nexists s

c) No conclusion

d) $\nexists RVU \cong \nexists SVT$

$\nexists RVT \cong \nexists SVU$