

# Corrective Assignment 2.2: Intro To Proofs (Bummer)

Support each conclusion with a valid reason.

1. Given:  $x + 30 = 12$   
Conclusion:  $x = -18$

2. Given:  $3(y + 4x) = 30$   
Conclusion:  $y + 4x = 13$

3. Given:  $7x = 21$   
Conclusion:  $x = 3$

4. Given:  $-x = 34$   
Conclusion:  $34 = -x$

5. If  $g = w$  and  $w = t$ ,  
then  $g = t$ .

6.  $\angle H \cong \angle H$

Fill in the missing statements or reasons for the following two-column proof.

Given:  $34 - x = 100$  Prove:  $x = -66$

Statement	Reason
1. $34 - x = 100$	1.
2. $-x = 66$	2.
3. $x = -66$	3.

Given:  $2x + 4 = -4$  Prove:  $x = -4$

Statement	Reason
1. $2x + 4 = -4$	1.
2. $2x = -8$	2.
3. $x = 2$	3.

Given:  $9x + 210 = 210 - 8x$  Prove:  $x = 0$

Statement	Reason
1.	1.
2. $9x = -8x$	2.
3. $17x = 0$	3.
4. $x = 0$	4.

Given:  $45 - 5x = -20$  Prove:  $x = 13$

Statement	Reason
1.	1.
2. $-5x = -65$	2.
3. $5x = 65$	3.
4. $x = 13$	4.

Given:  $-3(4x - 1) + 10x + 3 = 60$  Prove:  $x = -27$

Statement	Reason
1.	1.
2. $-12x + 3 + 10x + 3 = 60$	2.
3. $-2x + 3 + 3 = 60$	3.
4. $-2x + 6 = 60$	4.
5. $-2x = 54$	6.
6.	7.