

Corrective Assignment 2.2: Intro To Proofs (Bummer)

Support each conclusion with a valid reason.

1. Given: $x + 30 = 12$

Conclusion: $x = -18$
Subtraction Property

2. Given: $3(y + 4x) = 39$

Conclusion: $y + 4x = 13$
Division Property

3. Given: $7x = 21$

Conclusion: $x = 3$
Division Property

4. Given: $-x = 34$

Conclusion: $34 = -x$
Symmetric Property

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

Transitive Property

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

Reflexive Property

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. Given
2. $-x = 66$	2. Subtraction Property
3. $x = -66$	3. Symmetric Property

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

Statement	Reason
1. $2x + 4 = -4$	1. Given
2. $2x = -8$	2. Subtraction Property
3. $x = 2$	3. Division Property

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

Statement	Reason
1. $9x + 210 = 210 - 8x$	1. Given
2. $9x = -8x$	2. Subtraction Property
3. $17x = 0$	3. Addition Property
4. $x = 0$	4. Division Property

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

Statement	Reason
1. $45 - 5x = -20$	1. Given
2. $-5x = -65$	2. Subtraction Property
3. $5x = 65$	3. Multiplication Property
4. $x = 13$	4. Division Property

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

Statement	Reason
1. $-3(4x - 1) + 10x + 3 = 60$	1. Given
2. $-12x + 3 + 10x + 3 = 60$	2. Distributive Property
3. $-2x + 3 + 3 = 60$	3. Combine Like Terms
4. $-2x + 6 = 60$	4. Combine Like Terms
5. $-2x = 54$	6. Subtraction Property
6. $x = -27$	7. Division Property

Corrective Assignment 2.2: Intro To Proofs (Bummer)

Support each conclusion with a valid reason.

1. Given: $x + 30 = 12$
Conclusion: $x = -22$

2. Given: $3(y + 4x) = 39$
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.