

2.6 More Practice – Honors Up

Name: Answer key

Write a two-column proof.

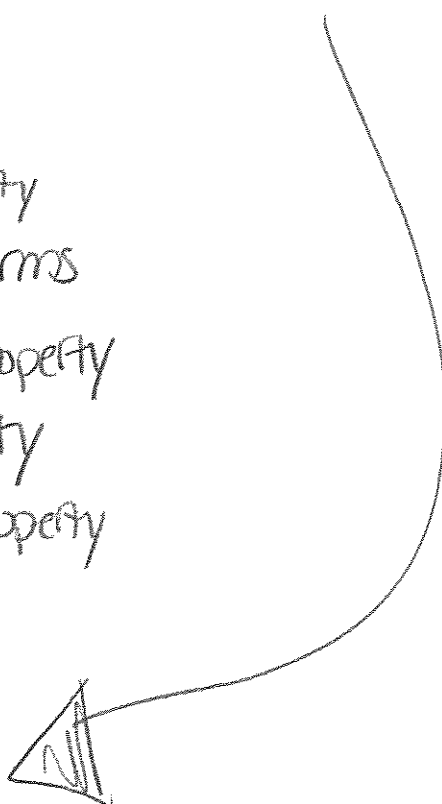
1. Given:  $16 = 2(x+23)-5$   
 Prove:  $x = -12.5$

2. Given:  $3y + 2x = 42$ ;  $x = 15$   
 Prove:  $y = 4$

*change to -12.5*

①

Statements	Reasons
① $16 = 2(x+23)-5$	① Given
② $16 = 2x + 46 - 5$	② Distribution Property
③ $16 = 2x + 41$	③ Combine like terms
④ $-25 = 2x$	④ Subtraction Property
⑤ $-12.5 = x$	⑤ Division Property
⑥ $x = -12.5$	⑥ Symmetric Property



②

Statement	Reasons
① $3y + 2x = 42$	① Given
② $3y + 2(15) = 42$	② Substitution Property
③ $3y + 30 = 42$	③ Simplify
④ $3y = 12$	④ Subtraction Property
⑤ $y = 4$	⑤ division Property