```
intseg_shift  THM

⊢  ∀a,b,a',b':ℤ. b-a = b'-a' ⇒ ({a..b⁻} ∼ {a'..b'⁻})
| by Def of <type> ∼ <type>
|
1. a : ℤ
2. b : ℤ
3. a' : ℤ
4. b' : ℤ
5. b-a = b'-a'
⊢  ∃f:({a..b⁻}→{a'..b'⁻}), g:({a'..b'⁻}→{a..b⁻}).
|  InvFuns({a..b⁻};{a'..b'⁻};f;g)
| by Witness: λx.x+a'-a | λx.x+a-a' THEN Analyze
|
|\
| 6. x : {a..b⁻}
| ⊢  (λx.x+a-a')((λx.x+a'-a)(x)) = x
|   by Compute
|        ⌈(λx.x+a-a')((λx.x+a'-a)(x))⌉
|        *⇒
|        ⌈(λx.x+a'-a)(x)+a-a'⌉
|        *⇒
|        x+a'-a+a-a'
|
.\
. 6. y : {a'..b'⁻}
. ⊢  (λx.x+a'-a)((λx.x+a-a')(y)) = y
.   by Compute
.        ⌈(λx.x+a'-a)((λx.x+a-a')(y))⌉
.        *⇒
.        ⌈(λx.x+a-a')(y)+a'-a⌉
.        *⇒
.        y+a-a'+a'-a
END
```