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expresion

```
let x = 5 in
  let f = lam (y) => y + x in
    let x = 6 in
      f 4
    end
  end
end
```

let(5, x. let(lam(y. suma(y, x), f. let(6, x. app(f, 4)))))

$\diamond \mid \bullet > \text{let}(5, x.\text{let}(\ldots))$

$\text{let}(\square, x.\text{let}(\ldots)); \diamond \mid \bullet > 5$

$\text{let}(\square, x.\text{let}(\ldots)); \diamond \mid \bullet < 5$

$\bullet; \diamond \mid x \leftarrow 3; \bullet > \text{let}(\text{lam}(y.\text{suma}(y, x), f.\text{let}(\ldots))$

$\text{let}(\square, f.\text{let}(\ldots)); \bullet; \diamond \mid \underbrace{x \leftarrow 5; \bullet}_{E_1} > \text{lam}(y.\text{suma}(y, x))$

$\text{let}(\square, f.\text{let}(\ldots)); \bullet; \diamond \mid E_1 < \langle\langle E_1, y.\text{suma}(y, x)\rangle\rangle$

$E_1; \bullet; \diamond \mid \underbrace{f \leftarrow \langle\langle E_1, y.\text{suma}(y, x)\rangle\rangle; E_1}_{E_2} > \text{let}(6.x.\text{app}(\ldots))$

$\text{let}(\square, x.\text{app}(\ldots)); E_1; \bullet; \diamond \mid E_2 > 6$

$\text{let}(\square, x.\text{app}(\ldots)); E_1; \bullet; \diamond \mid E_2 < 6$

$E_2; E_1; \bullet; \diamond \mid \underbrace{x \leftarrow 6; E_2}_{E_3} > \text{app}(f, 4)$

$app(\square, 4); E_2; E_1; \circ; \diamond \mid E_3 \succ f$

$app(\square, 4); E_2; E_1; \circ; \diamond \mid E_3 \prec \ll E_1, y.suma(y, x) \gg$

$app(\ll E_1, y.suma(y,x) \gg, \square); E_2; E_1; \circ; \diamond \mid E_3 \succ 4$

$app(\ll E_1, y.suma(y,x) \gg, \square); E_2; E_1; \circ; \diamond \mid E_3 \prec 4$

$E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \succ suma(y, x)$

$suma(\square, x); E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \succ y$

$suma(\square, x); E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \prec 4$

$suma(4, \square); E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \succ x$

$suma(4, \square); E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \prec 5$

$E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \prec 4+5$

$E_3; E_2; E_1; \circ; \diamond \mid y \leftarrow 4; E_1 \prec 9$

$E_2; E_1; \circ; \diamond \mid E_3 \prec 9$

$E_1; \circ; \diamond \mid E_2 \prec 9$

$\circ; \diamond \mid E_1 \prec 9$

$\diamond \mid \circ \prec 9$