Composition with abstraction is a four-step process: 1. **Abstraction** Add a λ -argument.

- 2. Value copy Copy the expression you already had (that's the binder's sister)
- 3. **Modify** the assignment
- 4. Replace the pronoun with the output of the modified assignment

Replace: $\lambda x \in D_e$. run(x) Modify: $\lambda x \in D_e$. run($g^{3\to x}(3)$) **Abstract + Copy:** $\lambda x \in D_e$. run(g(3)) λ_3 run(g(3)): t

1. Complete the following intransitive abstractions. Assume variable assignment g.

```
1.
             PA: \langle e, t \rangle
       \lambda x \in D_e. sleep(x)
\lambda x \in D_e. sleep(g^{\overline{2} \to x}(2))
    \lambda x \in D_e. sleep(g(2))
                        FA: t
           \lambda_2
                    sleep(g(2))
```

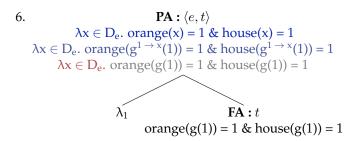
4.
$$\begin{aligned} \textbf{PA} : \langle e, t \rangle \\ \lambda x \in D_e. \ dream(x) \\ \lambda x \in D_e. \ dream(g^{2 \to x}(2)) \\ \lambda x \in D_e. \ dream(g(2)) \end{aligned}$$

$$\lambda x \in D_e. \ dream(g(2))$$

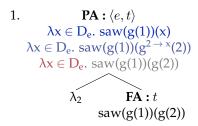
```
2.
               PA: \langle e, t \rangle
       \lambda x \in D_e. yellow(x)
\lambda x \in D_e. yellow(g^{4 \to x}(4))
    \lambda x \in D_e. yellow(g(4))
            \lambda_4
                           \overrightarrow{FA}:t
                     yellow(g(4))
```

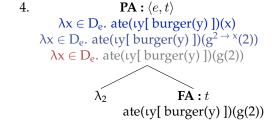
```
5.
                    PA: \langle e, t \rangle
     \lambda x \in D_e. on(\iota z[table(z)])(x)
\lambda x \in D_e. on(\iota z[table(z)])(g^{4 \to x}(4))
    \lambda x \in D_e. on(\iota z[table(z)])(g(4))
                                  FA:t
                     on(\iota z[table(z)])(g(4))
```

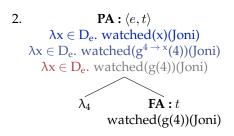
```
3.
            PA : \langle e, t \rangle
      \lambda x \in D_e. \ died(x)
\lambda x \in D_e. died(g^{1 \to x}(1))
    \lambda x \in D_e. died(g(1))
          \lambda_1
                      FA:t
                   died(g(1))
```

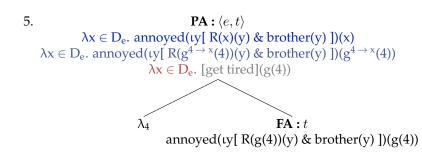


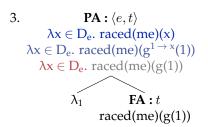
2. Complete the following transitive abstractions. Assume variable assignment g. **Be mindful of whether you're abstracting over the subject or the object.**

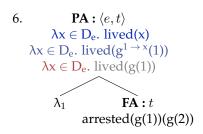












- **3.** Draw the following compositions. Assume variable assignment g.
 - 1. $who_1 t_1$ is pregnant
 - 2. $which_1 he_2 liked t_1$
 - 3. [CP that the key is in t_1]
- **4.** Fill in the blank node

