Quiz 2a Solution:

minsavings = 30,000
minincome = 39,000

Fire Rule 7:

earnings(20,000/X, steady) \& dependents(6/Y) \& greater(20,000/X, 39,000/minincome(Y)) \rightarrow income (inadequate)

So, we get income = inadequate

Fire Rule 5:

Amount_saved(10,000/X) \& dependents(6/Y) \& greater(10,000/X, 30,000/minsavings(Y)) \rightarrow savings_account (inadequate)

So, we get savings = inadequate

Fire Rule 1:

Savings_account(inadequate) \rightarrow invest (savings)

So, the person should invest in savings.
Quiz 2b Solution:

minsavings = 20,000
minincome = 31,000

Fire Rule 7:

earnings(10,000/X, steady) \^ dependents(4/Y) \^ greater(10,000/X, 31,000/minincome(Y)) \implies income (inadequate)

So, we get income = inadequate

Fire Rule 5:

Amount_saved(10,000/X) \^ dependents(4/Y) \^ greater(10,000/X, 20,000/minsavings(Y)) \implies savings_account (inadequate)

So, we get savings = inadequate

Fire Rule 1:

Savings_account(inadequate) \implies invest (savings)

So, the person should **invest in savings**.
**Quiz 2c Solution:**

minsavings = 15,000
minincome = 27,000

**Fire Rule 7:**

\[
\text{earnings}(10,000/X, \text{steady})^\text{dependents}(3/Y) \rightarrow \text{greater}(10,000/X, 27,000/\text{minincome}(Y)) \rightarrow \text{income (inadequate)}
\]

So, we get income = inadequate

**Fire Rule 5:**

\[
\text{Amount\_saved}(15,000/X) \rightarrow \text{dependents}(3/Y) \rightarrow \text{greater}(15,000/X, 15,000/\text{minsavings}(Y)) \rightarrow \text{savings\_account (inadequate)}
\]

So, we get savings = inadequate

**Fire Rule 1:**

\[
\text{Savings\_account(inadequate)} \rightarrow \text{invest (savings)}
\]

So, the person should invest in savings.