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|----|-----------------------|------------------------------------|
| 1. | $\{\neg p(x), q(x)\}$ | $p(x) \Rightarrow q(x)$            |
| 2. | $\{p(a)\}$            | $p(a)$                             |
| 3. | $\{\neg q(z), goal\}$ | $\exists z. q(z) \Rightarrow goal$ |
| 4. | $\{\neg p(z), goal\}$ | 1, 3                               |
| 5. | $\{goal\}$            | 2, 4                               |