

# Solutions 4

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**2.2.39** If a security code is not entered, then this door will not open.

**2.2.40** If I catch the bus at 8:05, then I will be on time for work.

**2.2.45** If the computer program is correct, then it did not produce error messages during translation.

**2.2.49**

$$\neg(\neg(p \wedge \neg r) \wedge (q \wedge \neg r)) \wedge (\neg((q \wedge \neg r) \wedge (p \wedge \neg r))).$$

**2.3.40** Muscles killed Sharky.

**2.3.43** e,d,c,a,b,f.