The reactance is always in units of

1. Farads

2. Henries

3. Ohms

The reactance of a capacitance is always

1. Positive

2. Negative

The reactance of an inductance is always

1. Positive

2. Negative

The reactance of a capacitance

1. Is independent of frequency

2. Increases with increasing frequency

3. Decreases with increasing frequency

The reactance of an inductor

1. Is independent of frequency

2. Increases with increasing frequency

3. Decreases with increasing frequency

The reactance of a resistor

1. Is independent of frequency

2. Increases with increasing frequency

3. Decreases with increasing frequency

4. Is meaningless

The expression

$$Z = 300 + j270$$

could represent

1. A resistor

2. A resistor and capacitor in series

3. A resistor and inductor in series

The expression

$$Z = 4.7\,\text{k}\Omega - j530\Omega$$

represents

1. A resistor of 4.7 kΩ in series with a resistance of 530 Ω

2. A resistance of 4.7 kΩ in parallel with a 530 μF capacitor

3. A resistnce of 4.7 kΩ in series with a 0.1 μF capacitor at a frequency of 3 kHz.