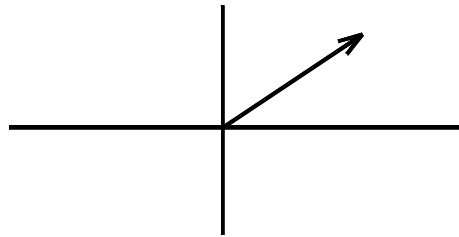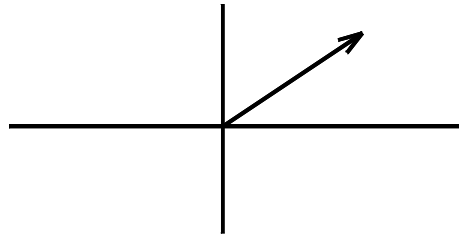This impedance diagram represents

1. A resistor in series with a capacitor

2. A resistor in series with an inductor

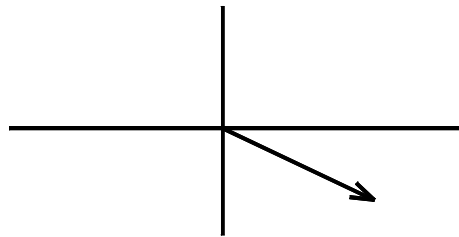3. An inductor in series with a capacitor

In this impedance diagram

1. The voltage leads the current

2. The voltage is in phase with the current

3. The voltage lags the current

This impedance diagram shows that the voltage and the current are related by

1. $V = |Z| \, e^{j\phi} I$
   and ϕ is positive

2. $V = |Z| \, e^{j\phi} I$
   and ϕ is negative

This impedance diagram represents

1. A resistor in series with a capacitor

2. A resistor in series with an inductor

3. An inductor in series with a capacitor

In this impedance diagram

1. The voltage leads the current

2. The voltage is in phase with the current
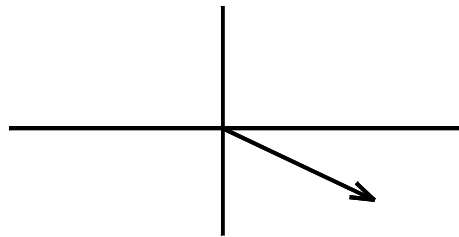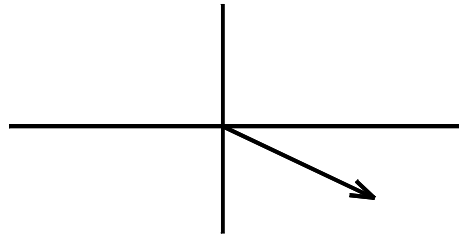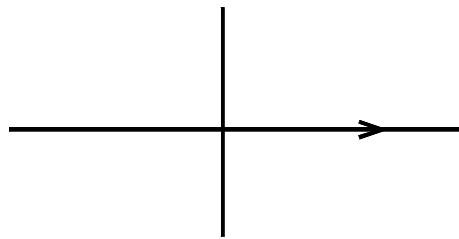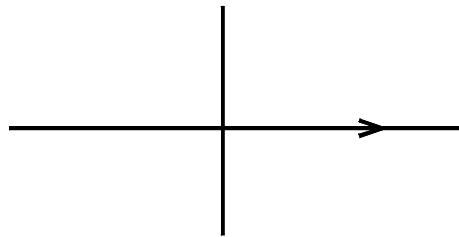
3. The voltage lags the current

This impedance diagram shows that the voltage and the current are related by

1. $V = |Z| e^{j\phi} I$
   and ϕ is positive

2. $V = |Z| e^{j\phi} I$
   and ϕ is negative

This complex impedance diagram could represent

1. A resistor

2. A resistor in series with a capacitor

3. A resistor in series with an inductor

4. A resistor, a capacitor and an inductor in series

The phase angle, ϕ, for this complex impedance diagram is

1. Positive

2. Zero

3. Negative