

1.

a.

$$F = 9 \times 10^9 \frac{(8 \times 10^{-6}) \times (40 \times 10^{-6})}{0.001}$$

2.

3.

a.

$$I = \frac{Q}{t}$$

$$Q = I \times t$$

$$Q = (2 \times 10^{-8}) \times (2 \times 10^{-3})$$

4.

5.