Lee sells electronics. He earns a 5% commission on each sale he makes.

a.   Write an equation that shows the proportional relationship between the dollar amount of electronics Lee sells, d, and the amount of money he makes in commission, c.

$$c = \frac{1}{20}d \text{ or } c = 0.05d$$

b.   Express the constant of proportionality as a decimal.

0.05

c.   Explain what the constant of proportionality means in the context of this situation.

The constant of proportionality of 0.05 means that Lee would earn five cents for every dollar of electronics that he sells.

d.   If Lee wants to make $\$100$ in commission, what is the dollar amount of electronics he must sell?

$$c = 0.05\,d$$
$$100 = 0.05\,d$$
$$\frac{1}{0.05}(100) = \frac{1}{0.05}(0.05)\,d$$
$$2,000 = d$$

Lee must sell $\$2,000$ worth of electronics.