Prefix/Infix/Postfix Notation Worksheet Created by Sam Craig for the West Lafayette High School ACSL Club of 2014--2015

In prefix, the operator comes before the operands; infix between; and postfix after. Only infix has parentheses, as the operator will always only have two operands in the other two notations. \uparrow designates an exponent such that e^x in prefix is $\uparrow e$ x. Convert square and n-th roots $\sqrt[n]{x}$ to, in prefix, $\uparrow x / 1$ n.

Questions

1. Translate the following equation into prefix.

$$E = mc^2$$

Answers

1.

$$E = mc^{2} \rightarrow (E = (m \times (c \uparrow 2)))$$
$$\rightarrow (= E (\times m (\uparrow c 2)))$$
$$\rightarrow = E \times m \uparrow c 2$$