

Sam chose $x=9$ as the answer; what justification could be used to explain whether Sam is correct or incorrect?

$$\frac{3}{4}x = 12$$

- a) correct, because $12 \times \frac{3}{4} = 9$
- b) correct, because $12 \div \frac{3}{4} = 9$
- c) incorrect, because $12 \times \frac{3}{4} = 16$
- d) incorrect, because $12 \div \frac{3}{4} = 16$