

6.EE Exponent Experimentation 3

Alignments to Content Standards: 6.EE.B.5 6.EE,A.1

Task

In each equation below, \boldsymbol{x} can be replaced with a number that makes the equation true. Find such a number.

a.
$$64 = x^2$$

b.
$$64 = x^3$$

c.
$$2^x = 32$$

$$d. x = \left(\frac{2}{5}\right)^3$$

e.
$$\frac{16}{9} = x^2$$

f.
$$2 \cdot 2^5 = 2^x$$

g.
$$2x = 2^4$$

h.
$$4^3 = 8^x$$

i.
$$x^2 = 25$$

$$j. (x+1)^2 = 25$$

IM Commentary