mobius

Logarithms - Solve Exponent Equation (Fraction Base)

1 Solve for the missing exponent

$$\left(\frac{1}{6}\right)^x = \frac{1}{36}$$

A	B
x = 2	x = -8

C	D
x = -4	x = -7

E	F
x = -5	x = 11

2 Solve for the missing exponent

$$\left(\frac{1}{3}\right)^x = \frac{1}{81}$$

A	B
x = 6	x = 1

C	D
x = 4	x = 3

E	F
x = 13	x = 5

3 Solve for the missing exponent

$$\left(\frac{1}{9}\right)^x = \frac{1}{81}$$

A	B
x = 4	x = -3

C	D
x = -5	x = -1

E	F
x = 2	x = 5

4 Solve for the missing exponent

$$\left(\frac{1}{8}\right)^x = \frac{1}{64}$$

A	B
x = 4	x = -4

C	D
x = -7	x = 2

E	F
x = -2	x = 0

5 Solve for the missing exponent

$$\left(\frac{1}{5}\right)^x = \frac{1}{25}$$

A	B
x = -3	x = 8

C	D
x = 2	x = -2

E	F
x = 6	x = 7

6 Solve for the missing exponent

$$\left(\frac{1}{2}\right)^x = \frac{1}{16}$$

A	B
x = -4	x = 7

C	D
x = 2	x = 4

E	F
x = 9	x = -5

7 Solve for the missing exponent

$$\left(\frac{1}{10}\right)^x = \frac{1}{100}$$

A	x = 3	B	x = 8
C	x = 2	D	x = -4
E	x = -8	F	x = 10

8 Solve for the missing exponent

$$\left(\frac{1}{2}\right)^x = \frac{1}{8}$$

A	B
x = -3	x = -7

C	D
x = 11	x = -2

E	F
x = -4	x = 3