Solve each exponential equation.

Solve for x. Show your work.

1.
$$4^{2x} = 4^2$$

2.
$$3^{2x} = 3^5$$

3.
$$2^{2x} = 2^3$$

4.
$$4^{2x} = 4^2$$

5.
$$4^{2x} = 4^3$$

6.
$$3^{2x} = 3^2$$

7.
$$4^{2x} = 4^5$$

8.
$$3^{2x} = 3^5$$



Solve each exponential equation. - Answer Key

1.
$$4^{2x} = 4^2$$

x = 1.0

2.
$$3^{2x} = 3^5$$

x = 2.5

3.
$$2^{2x} = 2^3$$

x = 1.5

4.
$$4^{2x} = 4^2$$

x = 1.0

5.
$$4^{2x} = 4^3$$

x = 1.5

6.
$$3^{2x} = 3^2$$

x = 1.0

7.
$$4^{2x} = 4^5$$

x = 2.5

8.
$$3^{2x} = 3^5$$

x = 2.5