

## Exponential Equations

### Different Bases

$$1. \quad 4^{x+1} = \frac{1}{64}$$

$$2. \quad 4^{7-3x} = \frac{1}{16}$$

$$3. \quad 3^{6-3x} = \frac{1}{27}$$

$$4. \quad 2^{3x+5} = \frac{1}{16}$$

$$5. \quad 2^{7-3x} = \frac{1}{4}$$

$$6. \quad 5^{2-x} = \frac{1}{25}$$

$$7. \quad 2^{x+2} = \frac{1}{8}$$

$$8. \quad \frac{1}{16} = 2^{-2x-6}$$

$$9. \quad 3^{1-x} = \frac{1}{27}$$

$$10. \quad 2^{1-x^2} = \frac{1}{8}$$

## Answers

### Exponential Equations

#### Different Bases

$$1. x = -4$$

$$2. x = 3$$

$$3. x = 3$$

$$4. x = -3$$

$$5. x = 3$$

$$6. x = 4$$

$$7. x = -5$$

$$8. x = -1$$

$$9. x = 4$$

$$10. x = 2, x = -2$$