

## Exponential Equations

### Same Base

$$1. \quad 12^{x-2} = 12^5$$

$$2. \quad 10^{1-x} = 10^4$$

$$3. \quad 5^{x+2} = 5^9$$

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

$$5. \quad 2^{4x+4} = 2^5$$

$$6. \quad 6^{-2n} = 6^3$$

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

$$8. \quad 2^{x+6} = 2^5$$

$$9. \quad 6^{3x} = 6^{15}$$

$$10. \quad 2^{2x+7} = 2^{15}$$

## Answers

### Exponential Equations

#### Same Base

$$1. x = 7$$

$$2. x = -3$$

$$3. x = 7$$

$$4. x = 2$$

$$5. x = \frac{1}{4}$$

$$6. n = -\frac{3}{2}$$

$$7. x = 2$$

$$8. x = -1$$

$$9. x = 5$$

$$10. x = 4$$