Lesson 2: Number Systems

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Counting

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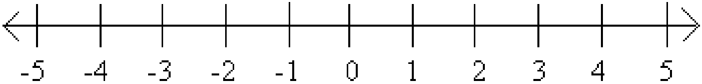
- Counting has evolved greatly since then.

The Number Line



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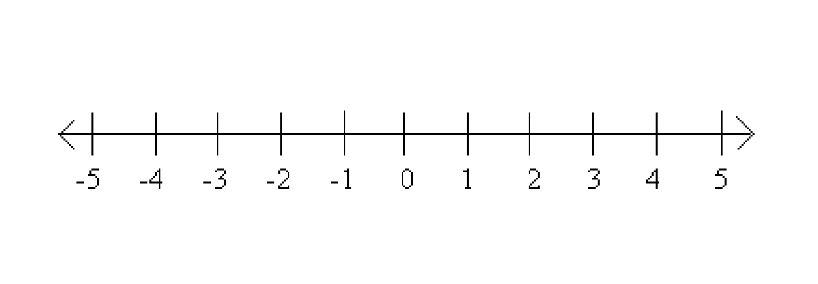

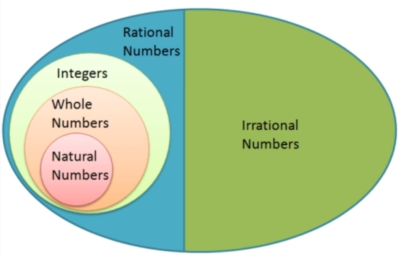

Base 10

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- You can count in *any other base*.
- What does this mean?

Review of Powers

- Evaluate the following:

$$3^2$$

$$2^4$$

$$5^3$$

$$10^3$$

$$3 \times 10^5$$

$$1^5$$

$$0^{53}$$

$$345^0$$

Review of Powers

- Evaluate the following:

$$3^2 = 9$$

$$2^4$$

$$5^3$$

$$10^3$$

$$3 \times 10^5$$

$$1^5$$

$$0^{53}$$

$$345^0$$

Review of Powers

- Evaluate the following:

$$3^2 = 9$$

$$2^4 = 16$$

$$5^3$$

$$10^3$$

$$3 \times 10^5$$

$$1^5$$

$$0^{53}$$

$$345^0$$

Review of Powers

- Evaluate the following:

$$3^2 = 9$$

$$2^4 = 16$$

$$5^3 = 125$$

$$10^3$$

$$3 \times 10^5$$

$$1^5$$

$$0^{53}$$

$$345^0$$

Review of Powers

- Evaluate the following:

$$3^2 = 9$$

$$2^4 = 16$$

$$5^3 = 125$$

$$10^3 = 100$$

$$3 \times 10^5$$

$$1^5$$

$$0^{53}$$

$$345^0$$

Review of Powers

- Evaluate the following:

$$3^2 = 9$$

$$2^4 = 16$$

$$5^3 = 125$$

$$10^3 = 100$$

$$3 \times 10^5 = 30000$$

$$1^5$$

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$$1506 = \underbrace{(1 \times 10^3)}_{=1000} + \underbrace{(5 \times 10^2)}_{=500} + \underbrace{(0 \times 10^1)}_{=0} + \underbrace{(6 \times 10^0)}_{=6}$$