

# Day 1

- 1. Pick a seat. Any seat.**
- 2. Get a whiteboard, a marker, and a paper towel.**
- 3. Write down one -ing verb to describe your summer.**
- 4. Hurry. We use time well in this class.**



## **5. What Language Is This?**

## **5. What Language Is This?**

a) Die fette Katze geht schnell.

## 5. What Language Is This?

- a) Die fette Katze geht schnell.
  
- b) El gato gordo camina rápidamente.

## 5. What Language Is This?

- a) Die fette Katze geht schnell.
- b) El gato gordo camina rápidamente.
- c) Il gatto grasso cammina velocemente.

## 5. What Language Is This?

- a) Die fette Katze geht schnell.
- b) El gato gordo camina rápidamente.
- c) Il gatto grasso cammina velocemente.
- d) Le gros chat marche rapidement.

## 5. What Language Is This?

- a) Die fette Katze geht schnell.
- b) El gato gordo camina rápidamente.
- c) Il gatto grasso cammina velocemente.
- d) Le gros chat marche rapidement.
- e) O gato gordo anda rapidamente.

## 5. What Language Is This?

- a) Die fette Katze geht schnell.
- b) El gato gordo camina rápidamente.
- c) Il gatto grasso cammina velocemente.
- d) Le gros chat marche rapidement.
- e) O gato gordo anda rapidamente.

German

## 5. What Language Is This?

- a) Die fette Katze geht schnell. German
- b) El gato gordo camina rápidamente. Spanish
- c) Il gatto grasso cammina velocemente.
- d) Le gros chat marche rapidement.
- e) O gato gordo anda rapidamente.

## 5. What Language Is This?

- a) Die fette Katze geht schnell. German
- b) El gato gordo camina rápidamente. Spanish
- c) Il gatto grasso cammina velocemente. Italian
- d) Le gros chat marche rapidement.
- e) O gato gordo anda rapidamente.

## 5. What Language Is This?

- a) Die fette Katze geht schnell. German
- b) El gato gordo camina rápidamente. Spanish
- c) Il gatto grasso cammina velocemente. Italian
- d) Le gros chat marche rapidement. French
- e) O gato gordo anda rapidamente.

## 5. What Language Is This?

- |   |            |
|---|------------|
| a) Die fette Katze geht schnell.        | German     |
| b) El gato gordo camina rápidamente.    | Spanish    |
| c) Il gatto grasso cammina velocemente. | Italian    |
| d) Le gros chat marche rapidement.      | French     |
| e) O gato gordo anda rapidamente.       | Portuguese |

## 5. What Language Is This?

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|---|------------|
| a) Die fette Katze geht schnell.        | German     |
| b) El gato gordo camina rápidamente.    | Spanish    |
| c) Il gatto grasso cammina velocemente. | Italian    |
| d) Le gros chat marche rapidement.      | French     |
| e) O gato gordo anda rapidamente.       | Portuguese |
| f) The fat cat walks fast.              | English    |

## 5. What Language Is This?

- a) Die **fette Katze** geht schnell. German
- b) El **gato gordo** camina rápidamente. Spanish
- c) Il **gatto grasso** cammina velocemente. Italian
- d) Le **gros chat** marche rapidement. French
- e) O **gato gordo** anda rapidamente. Portuguese
- f) The **fat cat** walks fast. English

## 5. What Language Is This?

g)  $4^2 - 3 \cdot 4 + (8 \div 2)^3$

Math

# |

4 more than p.

#1

4 more than p.

#2

4 less than p.

#1

4 more than p.

**p + 4**

#2

4 less than p.

# #2

4 less than  $p$ .

# #3

the product of 15 and  $c$ .

# #2

4 less than p.

**p - 4**

# #3

the product of 15 and  
c.

# #3

the product of 15 and  
c.

# #4

the sum of 12 and  
five times m.

# #3

the product of 15 and  
c.

**15c**

# #4

the sum of 12 and  
five times m.

# #4

the sum of 12 and  
five times  $m$ .

# #5

What language is  
this:

математика - мой  
друг.

# #4

the sum of 12 and  
five times m.

$$5m + 12$$

# #5

What language is  
this:

математика - мой  
друг.

# #5

What language is this:

математика - мой друг.

# #6

What does this mean in German?

Mathematik ist mein Freund.

# #5

What language is this:

математика - мой друг.

**Russian.**

# #6

What does this mean in German?

Mathematik ist mein Freund.

# #6

What does this mean  
in German?

Mathematik ist mein  
Freund.

# #7

the quotient of a  
number and six.

# #6

What does this mean  
in German?

Mathematik ist mein  
Freund.

**Mathematics is my  
friend.**

# #7

the quotient of a  
number and six.

# #7

the quotient of a  
number and six.

# #8

the product of 5 and  
 $m$  minus the quotient  
of  $t$  and 7.

# #7

the quotient of a  
number and six.

**$n/6$**

# #8

the product of 5 and  
m minus the quotient  
of t and 7.

# #8

the product of 5 and  
m minus the quotient  
of t and 7.

# #9

four times the sum of  
a number and 10.

# #8

the product of 5 and  
m minus the quotient  
of t and 7.

$$5m - t/7$$

# #9

four times the sum of  
a number and 10.

# #9

four times the sum of  
a number and 10.

# #10

write this in English:

$$5n - 7$$

# #9

four times the sum of  
a number and 10.

$$4(n + 10)$$

# #10

write this in English:

$$5n - 7$$

# | 0

write this in English:

$$5n - 7$$

# | |

write this in English:

$$q/6 + 7$$

# | 0

write this in English:

$$5n - 7$$

**seven less  
than five  
times a  
number**

# | |

write this in English:

$$q/6 + 7$$

# | |

write this in English:

$$q/6 + 7$$

# | 2

ten less than five  
times a number

# | |

write this in English:

$$q/6 + 7$$

**seven more  
than the  
quotient of q  
and six.**

# | 2

ten less than five  
times a number



## **7. Fill Out A Notecard**

## **7. Fill Out A Notecard**

a) What is your name?

## **7. Fill Out A Notecard**

- a) What is your name?
- b) How old are you?

## **7. Fill Out A Notecard**

- a) What is your name?
- b) How old are you?
- c) What is your favorite school subject?

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- a) What is your name?
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- d) What do you like about math?

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- a) What is your name?
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- c) What is your favorite school subject?
- d) What do you like about math?
- e) What do you dislike about math?

## **7. Fill Out A Notecard**

- a) What is your name?
- b) How old are you?
- c) What is your favorite school subject?
- d) What do you like about math?
- e) What do you dislike about math?
- f) What do you need to learn math best?

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- a) What is your name?
- b) How old are you?
- c) What is your favorite school subject?
- d) What do you like about math?
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- f) What do you need to learn math best?
- g) Fill in the blank: when I get older I would like to \_\_\_\_\_.

## **7. Fill Out A Notecard**

- a) What is your name?
- b) How old are you?
- c) What is your favorite school subject?
- d) What do you like about math?
- e) What do you dislike about math?
- f) What do you need to learn math best?
- g) Fill in the blank: when I get older I would like to \_\_\_\_\_.

## **8. Who I Am**

## **Practice**

Write in English:

$$2m + 3$$

## **Challenge**

Write in English:

$$2(m + 3)$$

## 9. Homework

### **Practice**

Write in English:

$$2m + 3$$

### **Challenge**

Write in English:

$$2(m + 3)$$

**Day 2**

# Day 2

## 1. Opener

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## 1. Opener

- a) Write this in math language: eight less than twice a number.

# Day 2

## 1. Opener

- a) Write this in math language: eight less than twice a number.
- b) What is the result if the original number is 40?

# Day 2

## 1. Opener

- a) Write this in math language: eight less than twice a number.
- b) What is the result if the original number is 40?
- c) What is the result if the original number is 20?

# Day 2

## 1. Opener

- a) Write this in math language: eight less than twice a number.
- b) What is the result if the original number is 40?
- c) What is the result if the original number is 20?
- d) If the result is 0, what is the original number?

# Day 2

## 1. Opener

- a) Write this in math language: eight less than twice a number.
- b) What is the result if the original number is 40?
- c) What is the result if the original number is 20?
- d) If the result is 0, what is the original number?
- e) What was the most popular baby girl name in 1994? Boy name?

## 2. Homework Review

### Practice

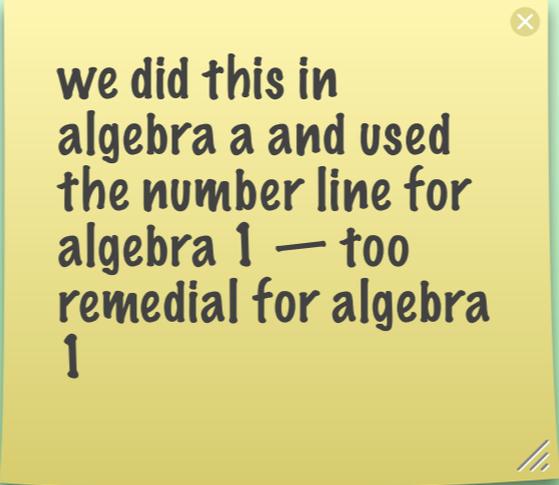
Write in English:

$$2m + 3$$

### Challenge

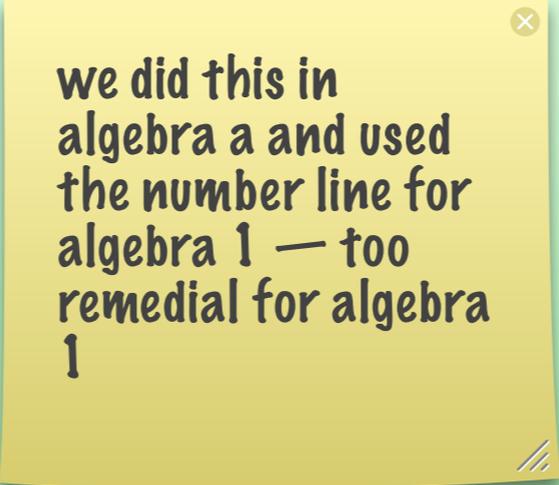
Write in English:

$$2(m + 3)$$



we did this in  
algebra a and used  
the number line for  
algebra 1 — too  
remedial for algebra  
1

### 3. Make A Number Line

A yellow sticky note with a close button in the top right corner and a corner icon in the bottom right corner. The text on the note is: "we did this in algebra a and used the number line for algebra 1 — too remedial for algebra 1".

we did this in  
algebra a and used  
the number line for  
algebra 1 — too  
remedial for algebra  
1

## 4. Use The Number Line

$$7 + 8$$

## 4. Use The Number Line

$$7 - 8$$

## 4. Use The Number Line

$$7 - 8 + 5$$

## 4. Use The Number Line

$$4 - 7 + 12 - 16 + 7$$

## 4. Use The Number Line

$$4 - (-7) + (-12) - (+16) + 7$$

## **5. Pizzazz**

## 6. Homework

### Practice

$$3 - 7 + 12 - 6 - (+7)$$

### Challenge

$$3 + (-7) - (+12) - 6 - (+7)$$

# Day 3

$$7 - 10 + 1 - 9 =$$

$$10 - (+8) - (-2) - 7 =$$

$$(5)(-2)(3)(-4)(-1) =$$

$$-1 + 1 - 1 + 1 - 1 \dots$$

# Day 3

## 1. Opener

$$7 - 10 + 1 - 9 =$$

$$10 - (+8) - (-2) - 7 =$$

$$(5)(-2)(3)(-4)(-1) =$$

$$-1 + 1 - 1 + 1 - 1 \dots$$

# Day 3

## 1. Opener

Simplify these.

$$7 - 10 + 1 - 9 =$$

$$10 - (+8) - (-2) - 7 =$$

$$(5)(-2)(3)(-4)(-1) =$$

$$-1 + 1 - 1 + 1 - 1 \dots$$

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$(5)(-2)(3)(-4)(-1) =$

$-1 + 1 - 1 + 1 - 1 \dots$

# Day 3

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Simplify these.

a)  $7 - 10 + 1 - 9 =$

b)  $10 - (+8) - (-2) - 7 =$

c)  $(5)(-2)(3)(-4)(-1) =$

$$-1 + 1 - 1 + 1 - 1 \dots$$

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a)  $7 - 10 + 1 - 9 =$

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d) This sequence goes on for 784 numbers. What is the sum?

$$-1 + 1 - 1 + 1 - 1 \dots$$

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Simplify these.

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b)  $10 - (+8) - (-2) - 7 =$

c)  $(5)(-2)(3)(-4)(-1) =$

d) This sequence goes on for 784 numbers. What is the sum?

$$-1 + 1 - 1 + 1 - 1 \dots$$

e) What does Manero's Steakhouse in Greenwich, CN, offer to any baby born in the restaurant?

## 6. Homework

### Practice

$$3 - 7 + 12 - 6 - (+7)$$

### Challenge

$$3 + (-7) - (+12) - 6 - (+7)$$



## **2. Chocolate Math**

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1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)

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1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)
2. Multiply this number by 2.

## 2. Chocolate Math

1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)
2. Multiply this number by 2.
3. Add 5.

## 2. Chocolate Math

1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)
2. Multiply this number by 2.
3. Add 5.
4. Multiply it by 50.

## 2. Chocolate Math

1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)
2. Multiply this number by 2.
3. Add 5.
4. Multiply it by 50.
5. If you have already had your birthday, add 1758. If you haven't, add 1757.

## 2. Chocolate Math

1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)
2. Multiply this number by 2.
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4. Multiply it by 50.
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6. Now subtract the four-digit year you were born in.

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6. Now subtract the four-digit year you were born in.
7. You should have a three-digit number.

## 2. Chocolate Math

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THE FIRST DIGIT OF THIS IS YOUR ORIGINAL NUMBER

## 2. Chocolate Math

1. Pick the number of times per week you'd like to have chocolate. (At least once but less than ten times.)
2. Multiply this number by 2.
3. Add 5.
4. Multiply it by 50.
5. If you have already had your birthday, add 1758. If you haven't, add 1757.
6. Now subtract the four-digit year you were born in.
7. You should have a three-digit number.

THE FIRST DIGIT OF THIS IS YOUR ORIGINAL NUMBER  
THE NEXT TWO NUMBERS ARE YOUR AGE

### **3. Order of Operations**

$$20 - 3 + 4$$

### **3. Order of Operations**

$$(20)(-3)(4)$$

### **3. Order of Operations**

$$20 + 5 \cdot 4$$

### **3. Order of Operations**

$$20 + 5 \cdot (4 - 1)$$

### **3. Order of Operations**

$$20 + 5 \cdot (4 - 1)^2$$

### 3. Order of Operations

$$20 \div 5 \cdot 2 + 5 \cdot (4 - 1)^2$$

### 3. Order of Operations

$$6 \cdot 2^2 =$$

$$4 \cdot 3^2 =$$

$$(6 - 8)^2 \cdot (1 - 7) =$$

$$4^2 - 2(3)(9) =$$

$$5^2 - 4(2)(3) =$$

$$5 + 4 \cdot 2^3 =$$

$$9 \div 3 \cdot 2 + 3 - 2 + 7^2 =$$

### 3. Order of Operations

$$6 \cdot 2^2 =$$

$$4 \cdot 3^2 =$$

$$(6 - 8)^2 \cdot (1 - 7) =$$

$$4^2 - 2(3)(9) =$$

$$5^2 - 4(2)(3) =$$

$$5 + 4 \cdot 2^3 =$$

$$9 \div 3 \cdot 2 + 3 - 2 + 7^2 =$$

$$15 - 2^3 + 50 \div 5 - 3 + 4(3)^2 + 1 - 2 + 3 - 4 - 12 \cdot 2^2 =$$

## 4. Evaluating

$$7 + 8$$

## 4. Evaluating

$$a + x$$

## 4. Evaluating

Evaluate:

$$a + x$$

## 4. Evaluating

Evaluate:

$$a + x$$

for  $a = 7$  and  $x = 8$

## 4. Evaluating

Evaluate:

$$a + x$$

for  $a = 12$  and  $x = 10$

## 4. Evaluating

Evaluate:

$$a + x$$

for  $a = 1$  and  $x = 14$

## 4. Evaluating

Evaluate:

$$a + x$$

for  $a = 1,500$  and  $x = 23,000,000$

## 4. Evaluating

Evaluate:

$$\text{PTS} + \text{RB} + \text{STL} + .5 \cdot \text{AST} + .5 \cdot \text{BLK} - \text{FGA} - \text{TO} - .5 \cdot \text{FTA} - .5 \text{PF}$$

## 4. Evaluating

Evaluate:

$$b^2 - 4ac$$

for  $a = 7$ ,  $b = -5$ , and  $c = 2$

## 4. Evaluating

Evaluate:

$$b^2 - 4ac$$

for  $a =$  ,  $b =$  , and  $c =$



## **5. Sampler**

## Practice

Evaluate:

$$2ab + 5$$

for  $a = -3$ ,  $b = -2$

## Challenge

Evaluate:

$$-2a^3b + 5$$

for  $a = -3$ ,  $b = -2$

## 6. Homework

### Practice

Evaluate:

$$2ab + 5$$

for  $a = -3$ ,  $b = -2$

### Challenge

Evaluate:

$$-2a^3b + 5$$

for  $a = -3$ ,  $b = -2$

# Day 4

$$(-1)(-1)(1)(-1)(1)(-1)(-1)(-1)(-1)(50) =$$

$$(-2)(3)(-4)(5) =$$

$$10 - (+32) - (-22) =$$

$$1 - 2 + 3 - 4 + \dots - 50 =$$

$$x^2 - 5x + 6$$

$$x^2 - 5x + 6 = 0$$

# Day 4

## 1. Opener

$$(-1)(-1)(1)(-1)(1)(-1)(-1)(-1)(-1)(50) =$$

$$(-2)(3)(-4)(5) =$$

$$10 - (+32) - (-22) =$$

$$1 - 2 + 3 - 4 + \dots - 50 =$$

$$x^2 - 5x + 6$$

$$x^2 - 5x + 6 = 0$$

# Day 4

## 1. Opener

Simplify each of these:

$$(-1)(-1)(1)(-1)(1)(-1)(-1)(-1)(-1)(50) =$$

$$(-2)(3)(-4)(5) =$$

$$10 - (+32) - (-22) =$$

$$1 - 2 + 3 - 4 + \dots - 50 =$$

$$x^2 - 5x + 6$$

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d)  $1 - 2 + 3 - 4 + \dots - 50 =$

e) Evaluate:  $x^2 - 5x + 6$  for  $x = 6$

$$x^2 - 5x + 6 = 0$$

# Day 4

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e) Evaluate:  $x^2 - 5x + 6$  for  $x = 6$

f) What number could you evaluate in (e) so that  $x^2 - 5x + 6 = 0$

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b)  $(-2)(3)(-4)(5) =$

c)  $10 - (+32) - (-22) =$

d)  $1 - 2 + 3 - 4 + \dots - 50 =$

e) Evaluate:  $x^2 - 5x + 6$  for  $x = 6$

f) What number could you evaluate in (e) so that  $x^2 - 5x + 6 = 0$

g) What appetizer is most requested with a last meal?

## Practice

Evaluate:

$$2ab + 5$$

for  $a = -3$ ,  $b = -2$

## Challenge

Evaluate:

$$-2a^3b + 5$$

for  $a = -3$ ,  $b = -2$

## 6. Homework

### Practice

Evaluate:

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### Challenge

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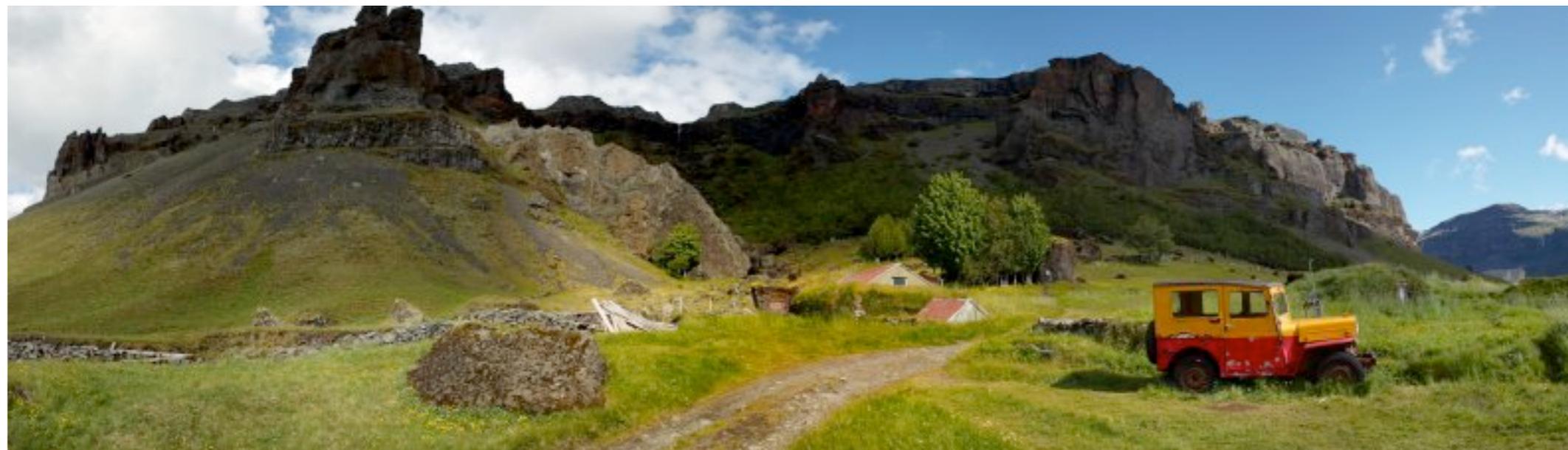












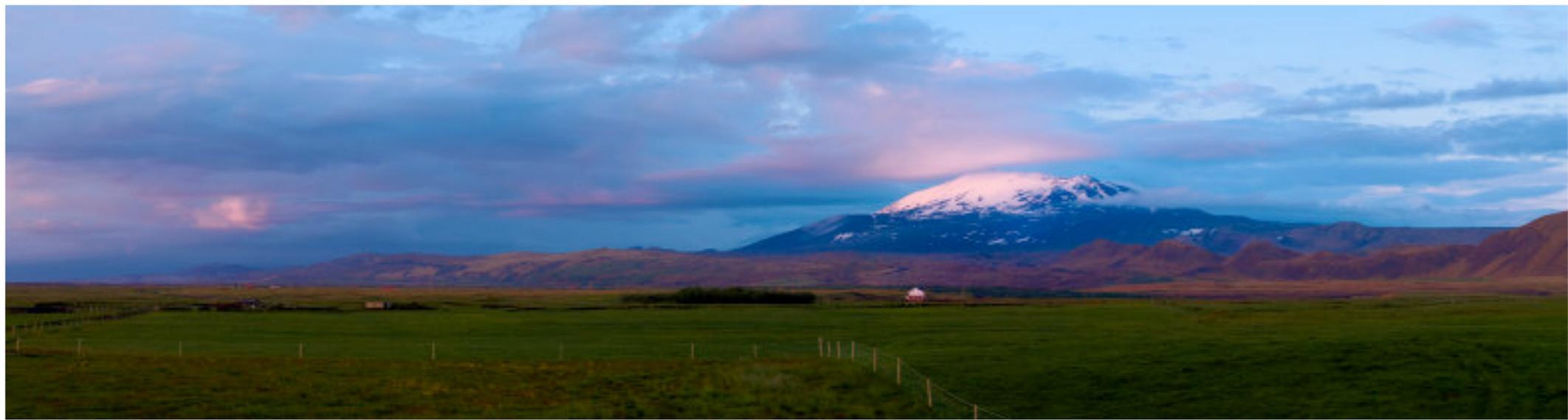
























### **3. Order of Operations**

$$20 - 3 + 4$$

### **3. Order of Operations**

$$(20)(-3)(4)$$

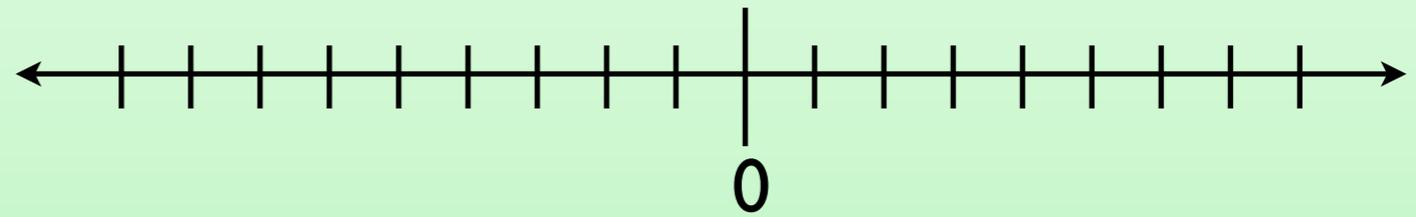
### 3. Order of Operations

$$20 \div 5 \cdot 2 + 5 \cdot (4 - 1)^2$$

## **2. Kinds of Numbers**

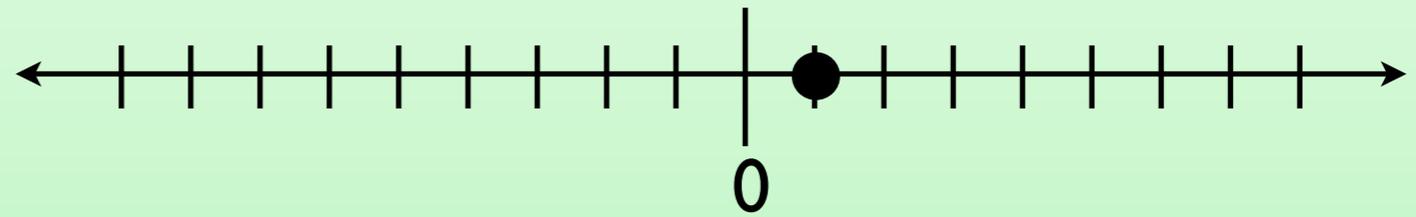
## 2. Kinds of Numbers

natural numbers



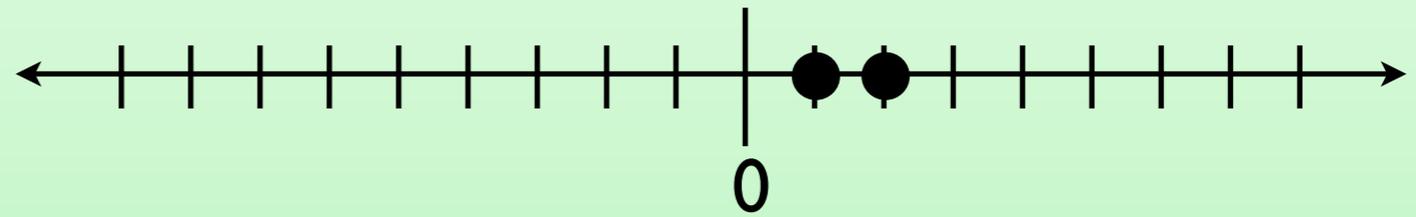
## 2. Kinds of Numbers

natural numbers



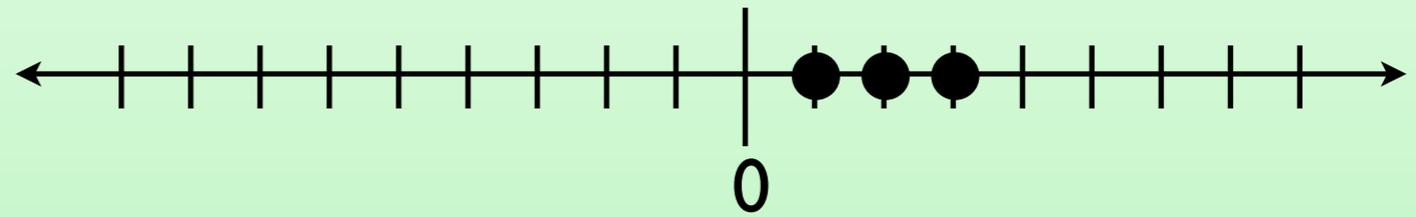
## 2. Kinds of Numbers

natural numbers



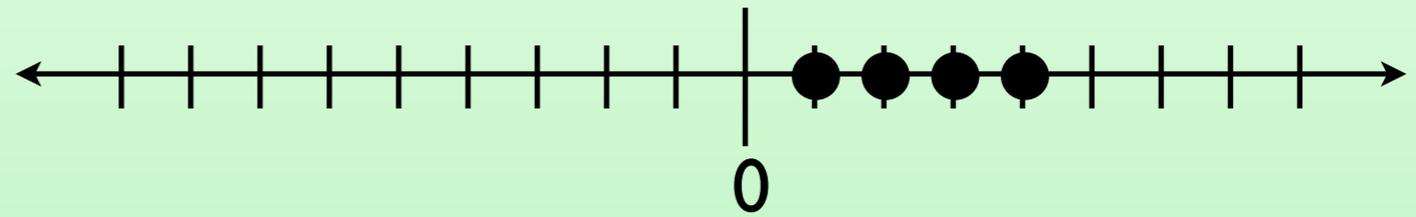
## 2. Kinds of Numbers

natural numbers



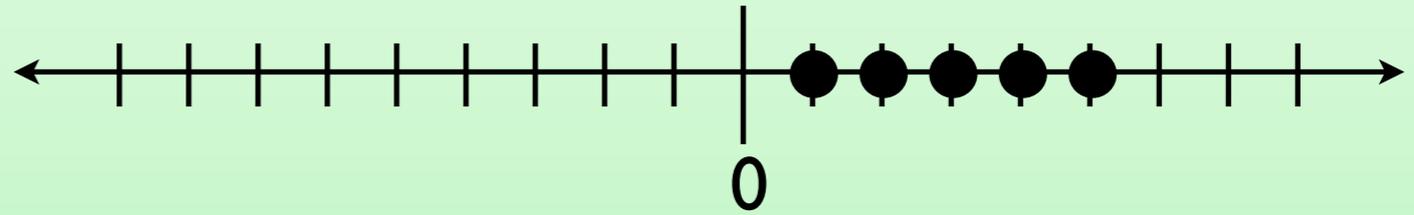
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natural numbers



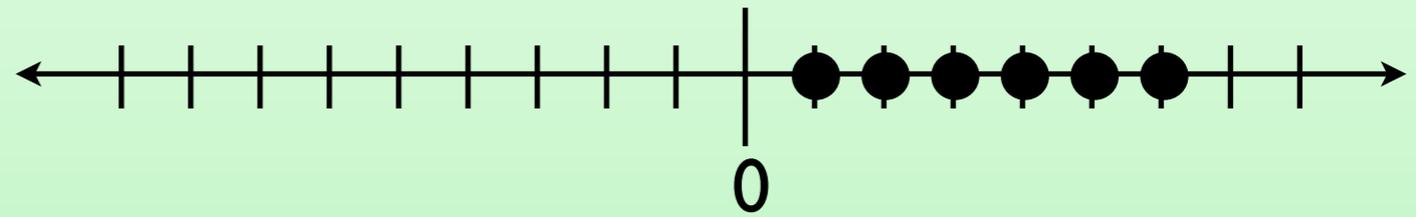
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natural numbers



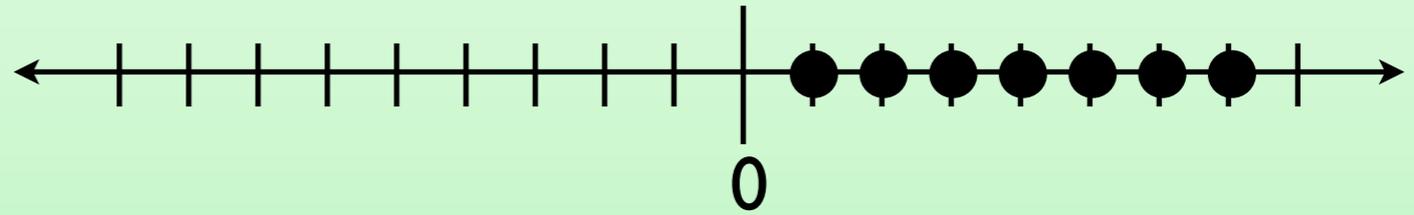
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natural numbers



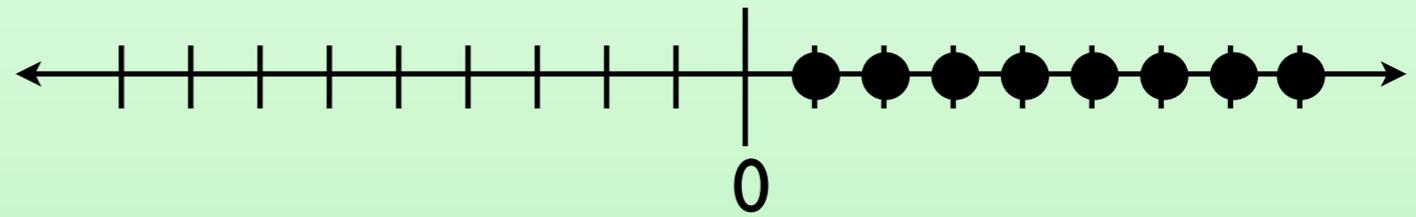
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natural numbers



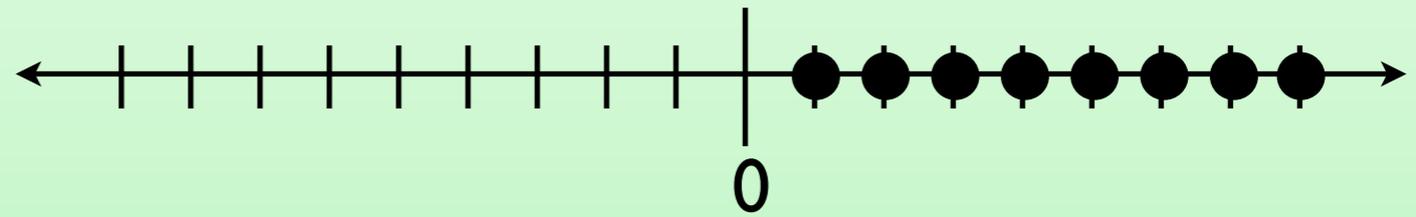
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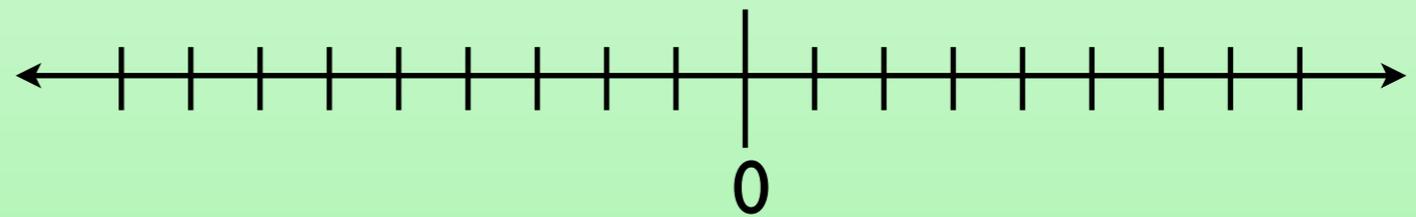


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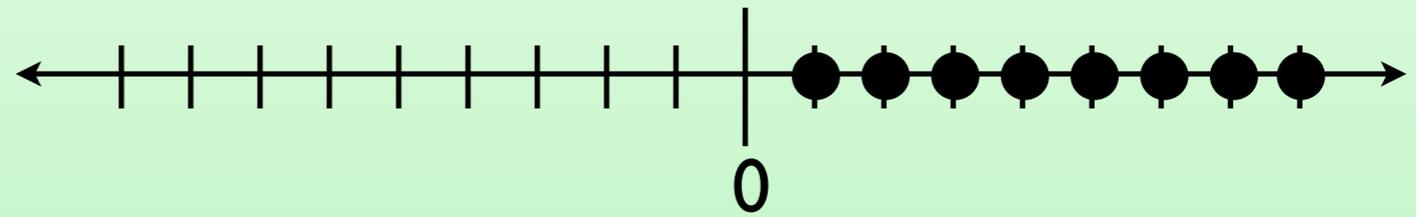


whole numbers

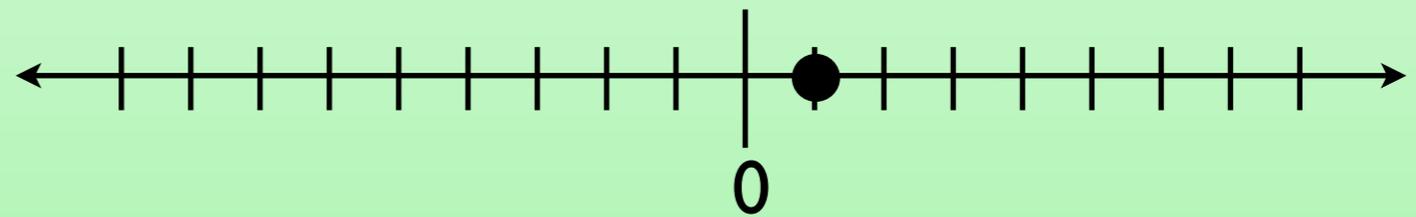


## 2. Kinds of Numbers

natural numbers

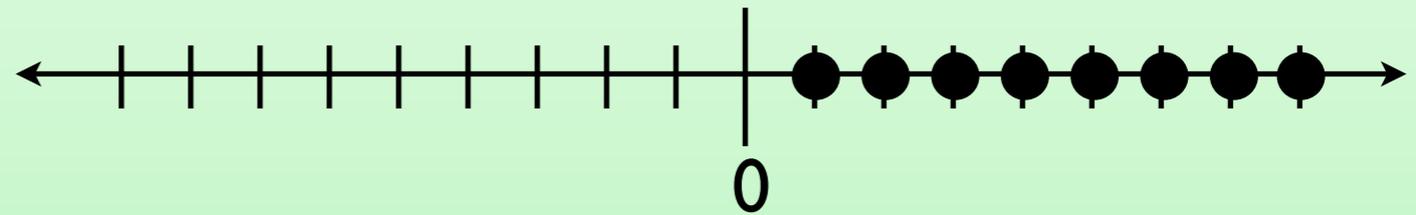


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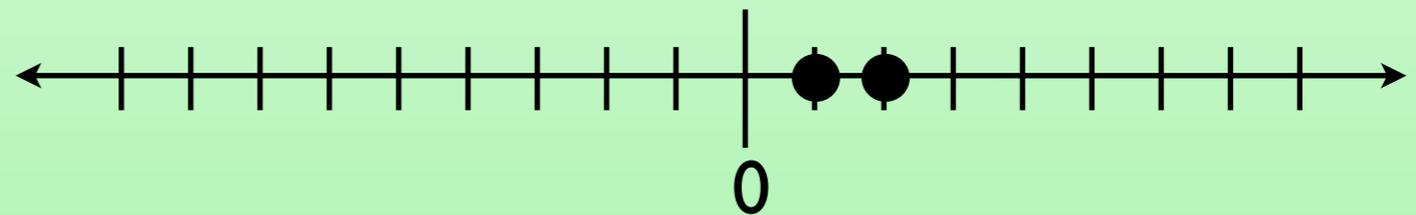


## 2. Kinds of Numbers

natural numbers

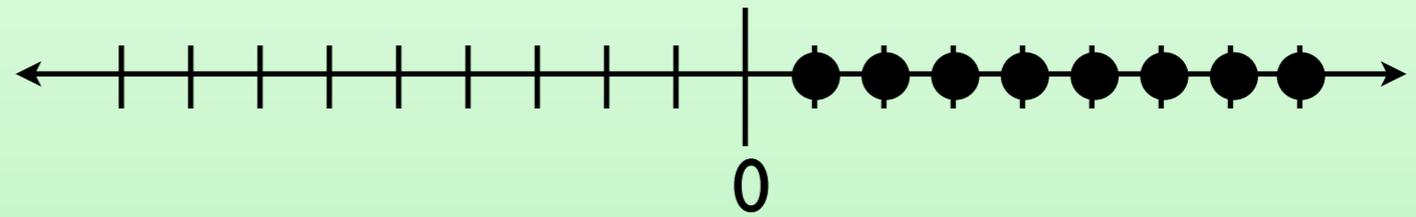


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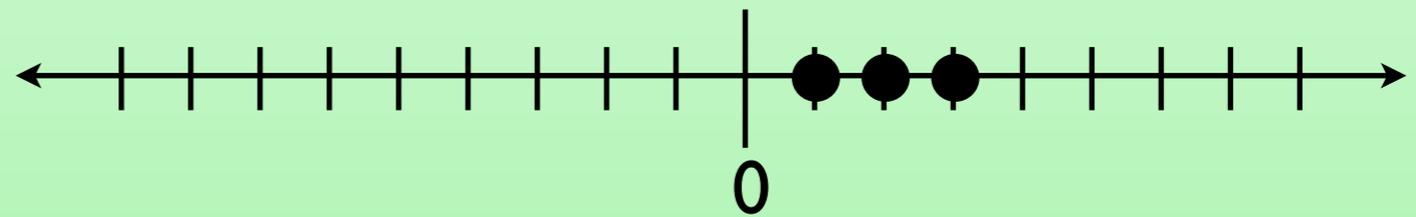


## 2. Kinds of Numbers

natural numbers

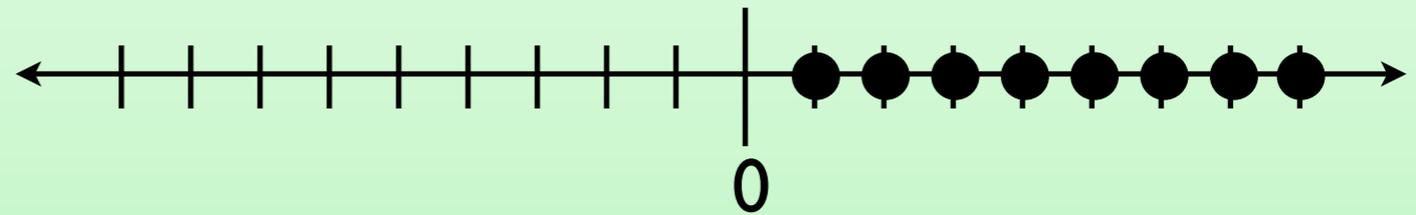


whole numbers

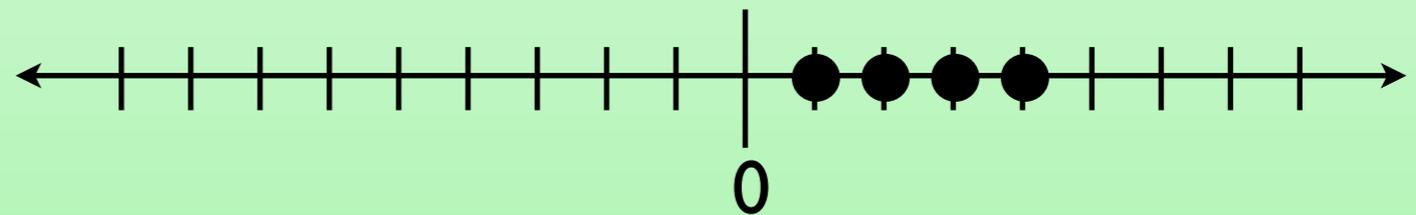


## 2. Kinds of Numbers

natural numbers

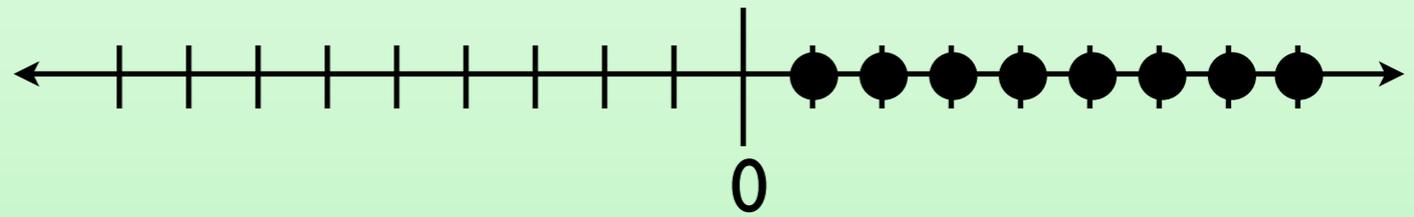


whole numbers

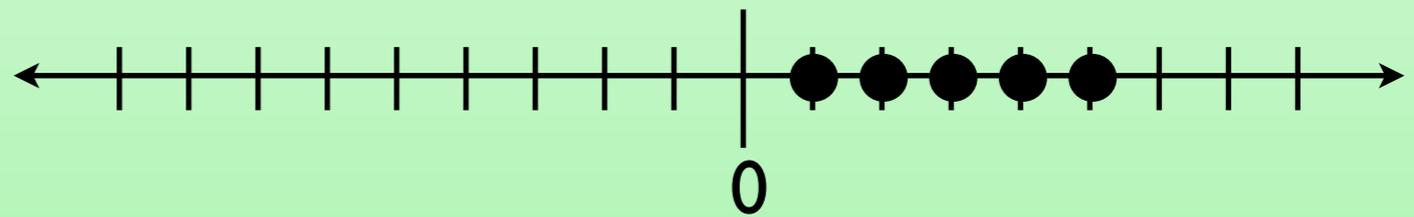


## 2. Kinds of Numbers

natural numbers

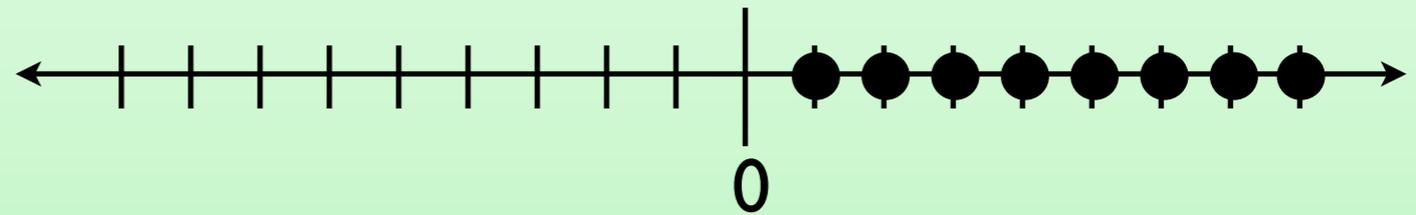


whole numbers

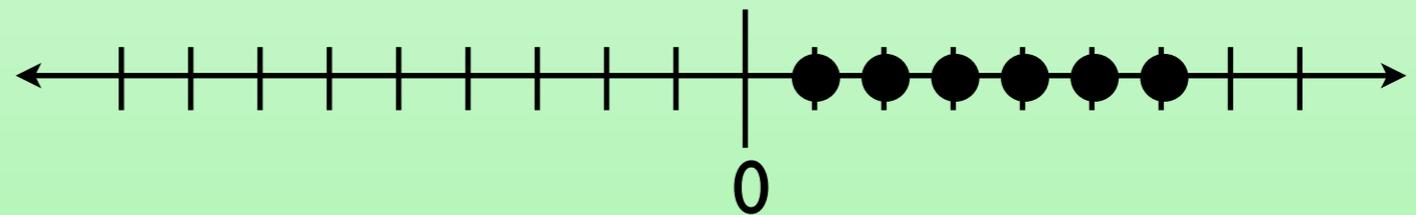


## 2. Kinds of Numbers

natural numbers

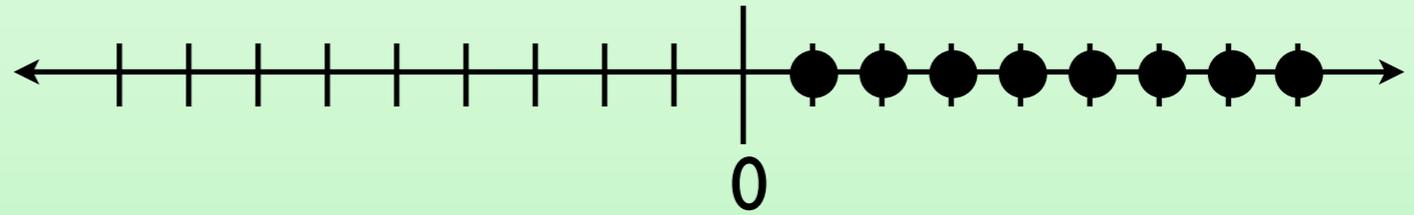


whole numbers

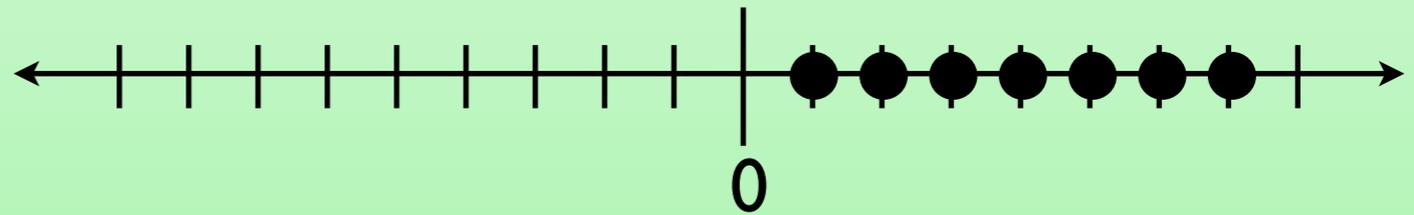


## 2. Kinds of Numbers

natural numbers

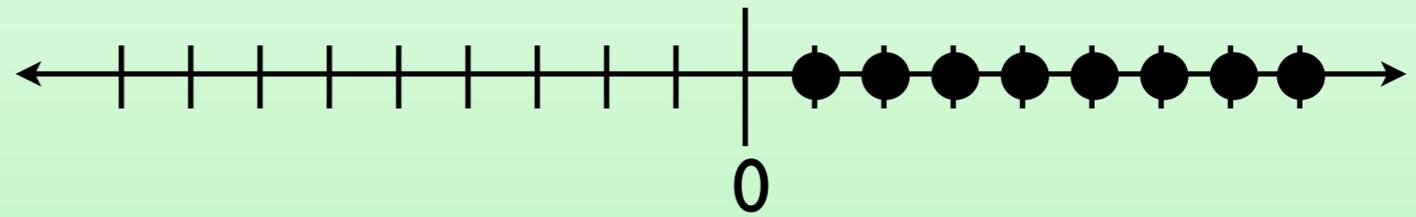


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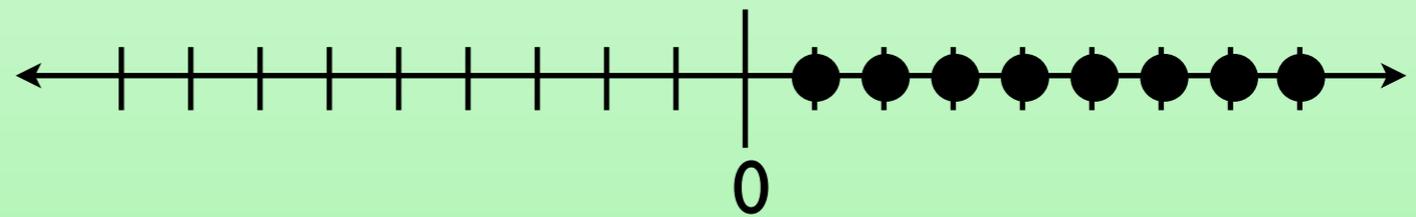


## 2. Kinds of Numbers

natural numbers

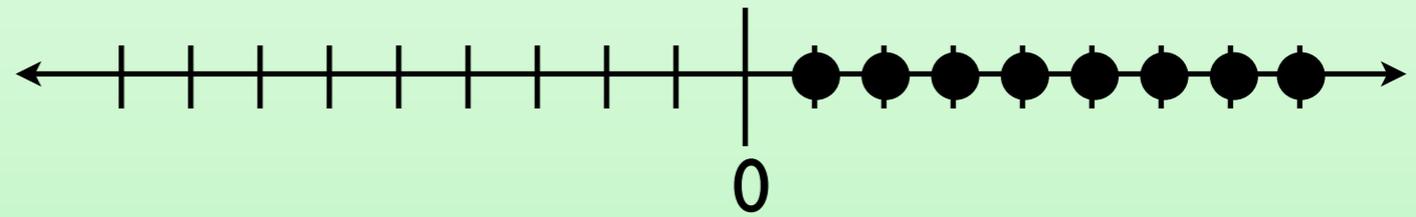


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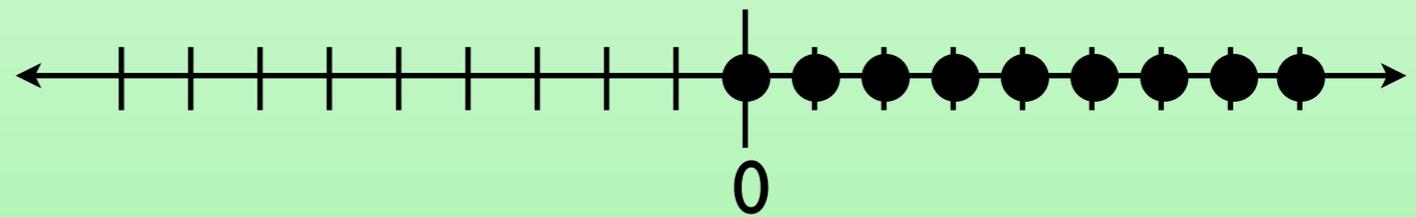


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natural numbers

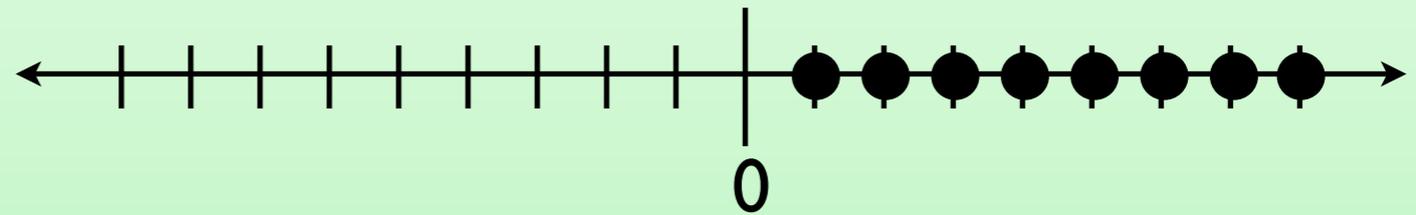


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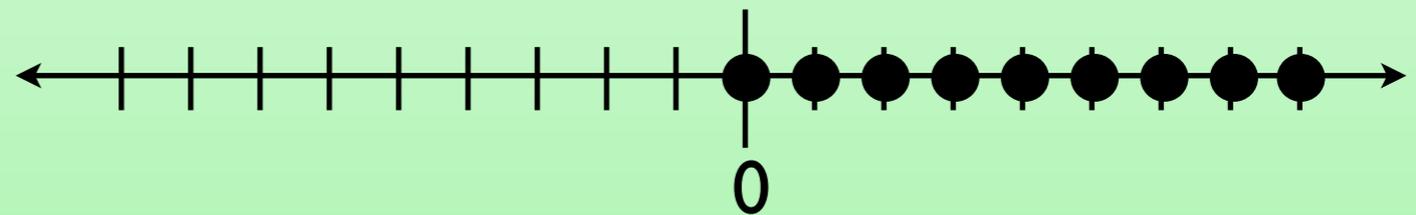


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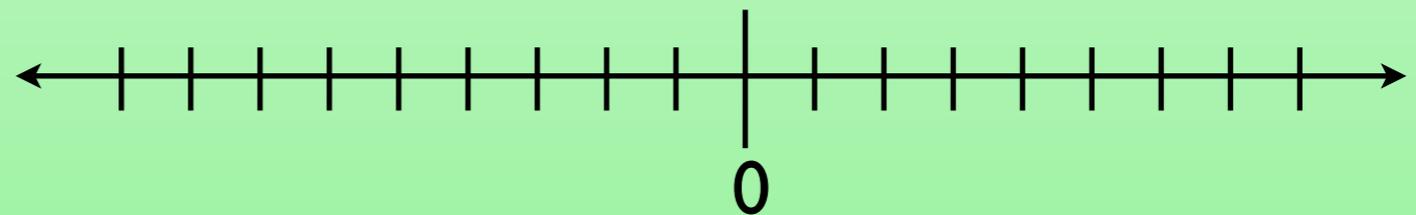
natural numbers



whole numbers

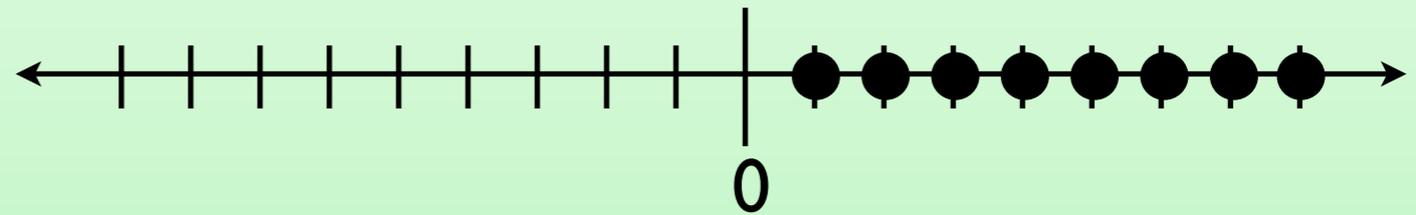


integers

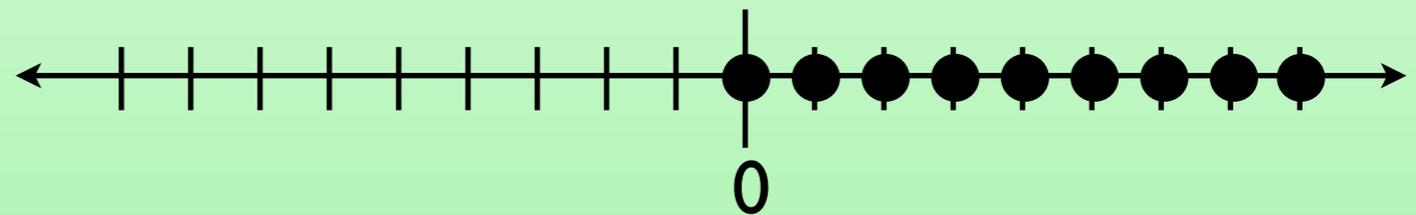


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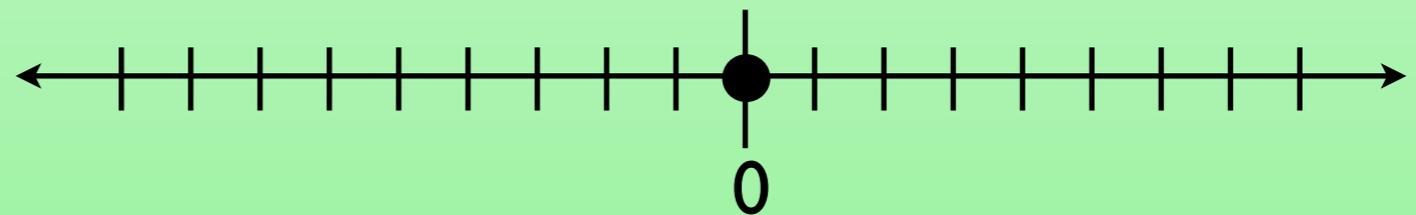
natural numbers



whole numbers

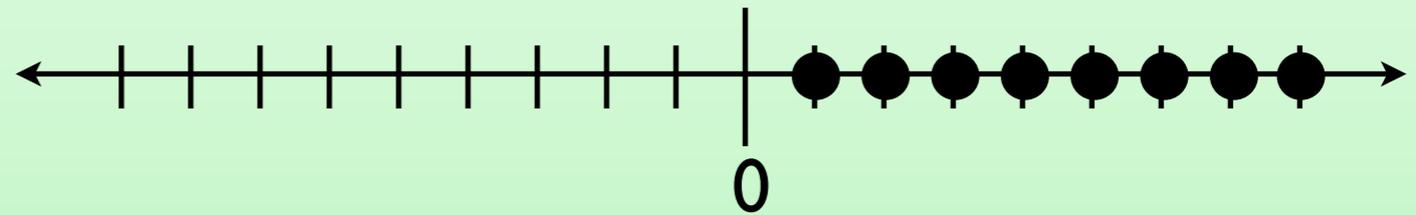


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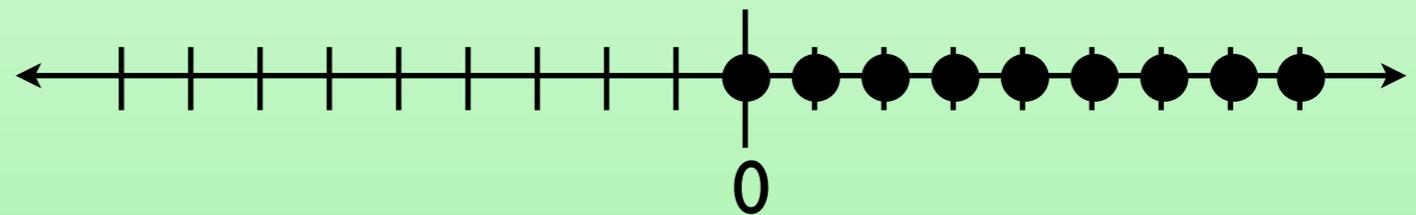


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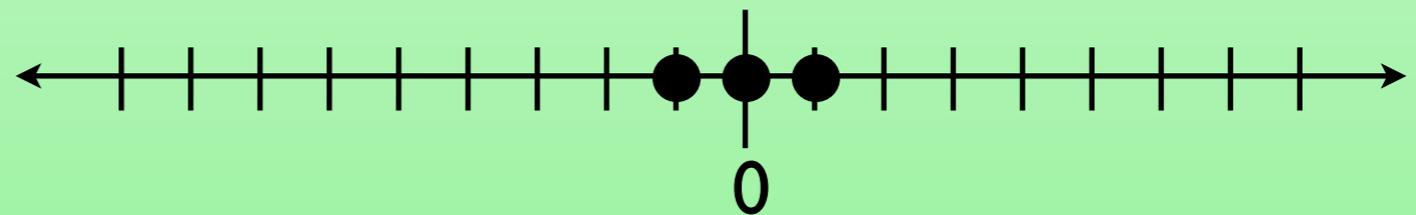
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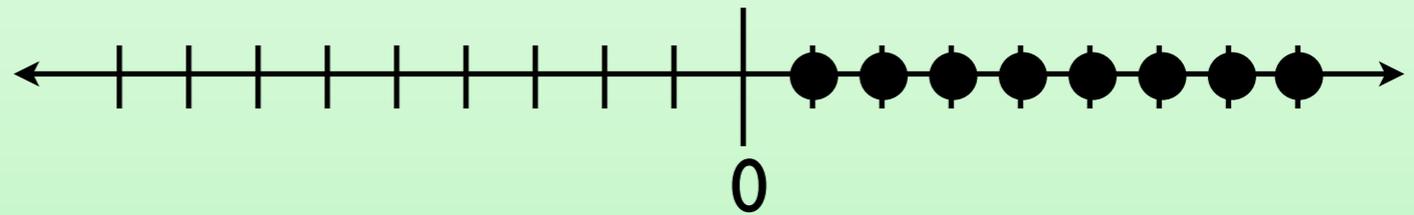


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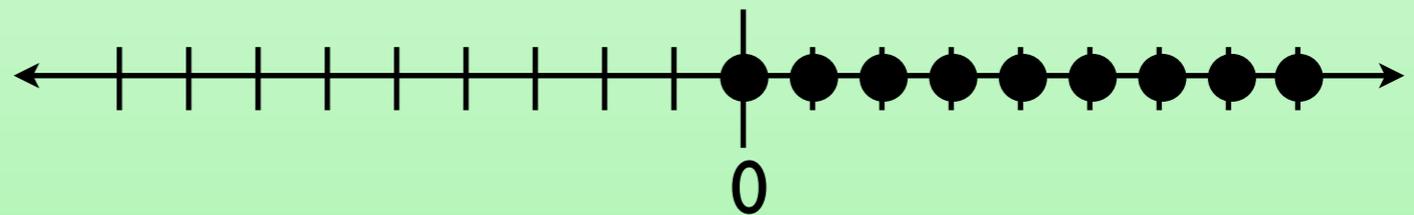


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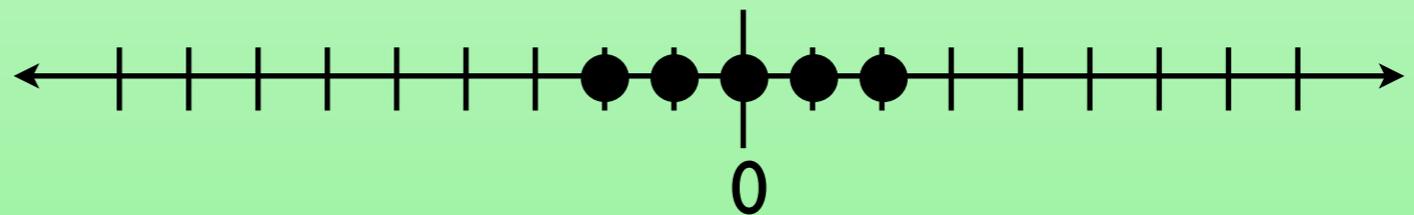
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whole numbers

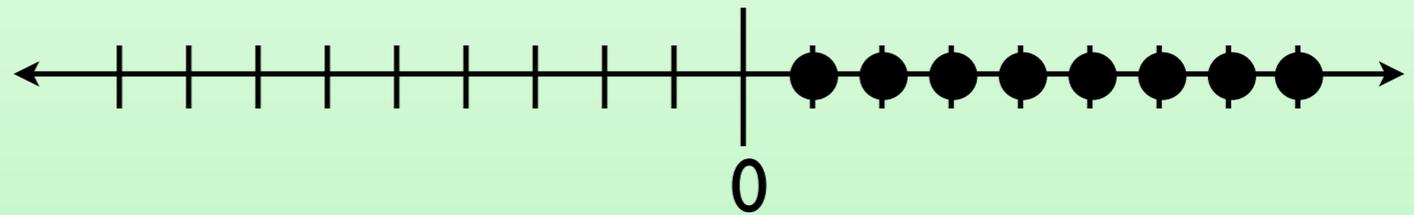


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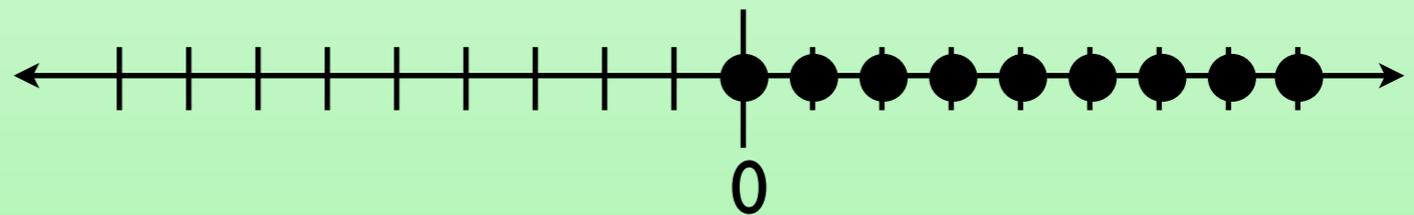


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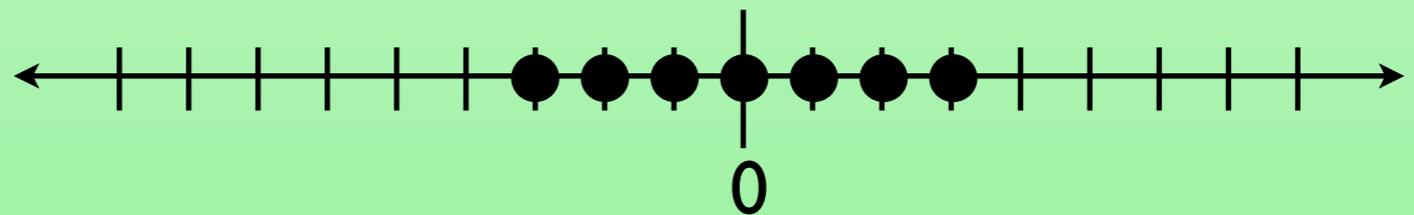
natural numbers



whole numbers

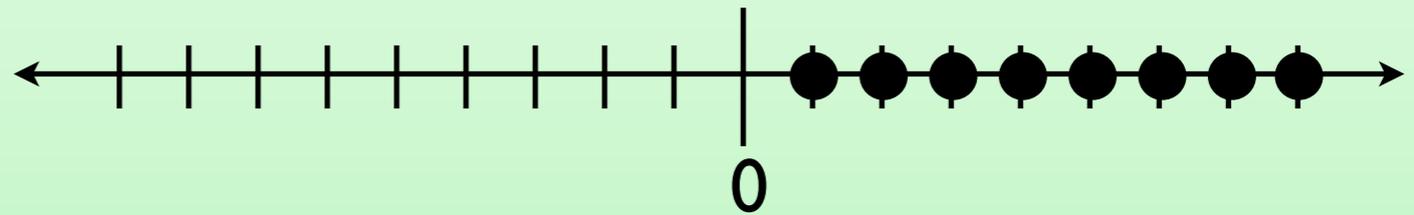


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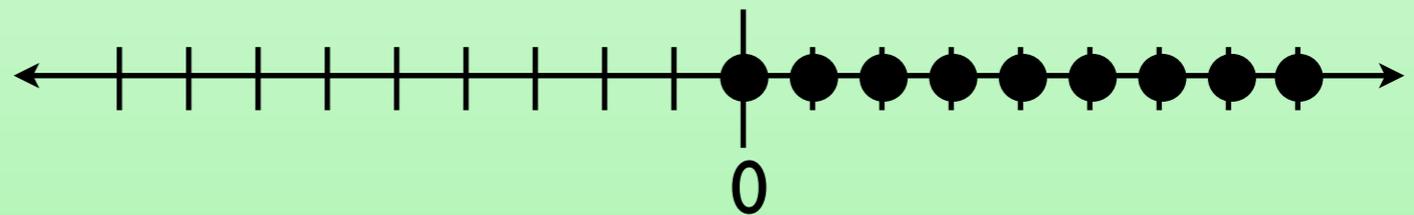


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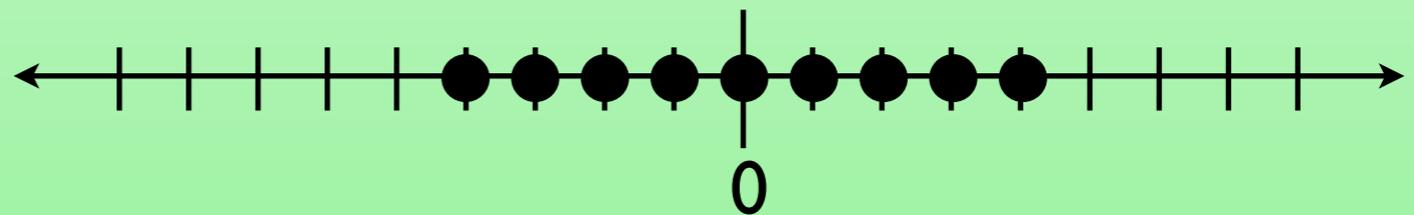
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whole numbers

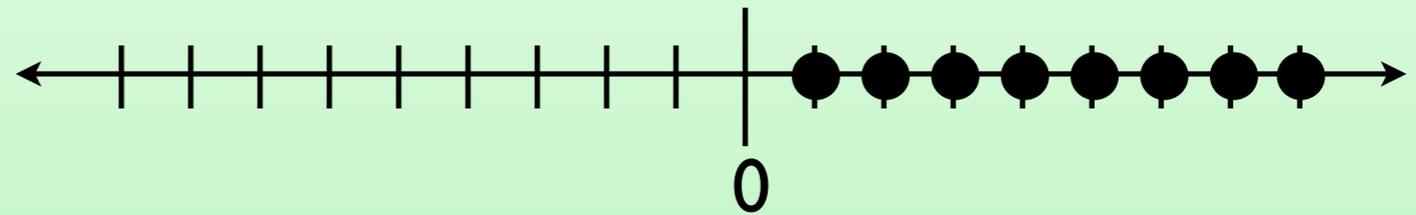


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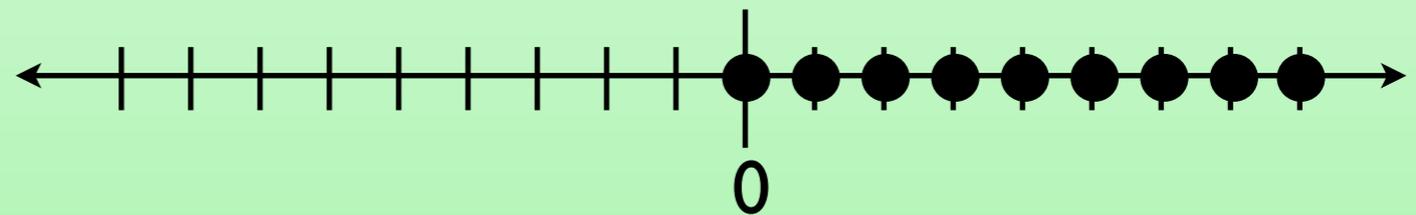


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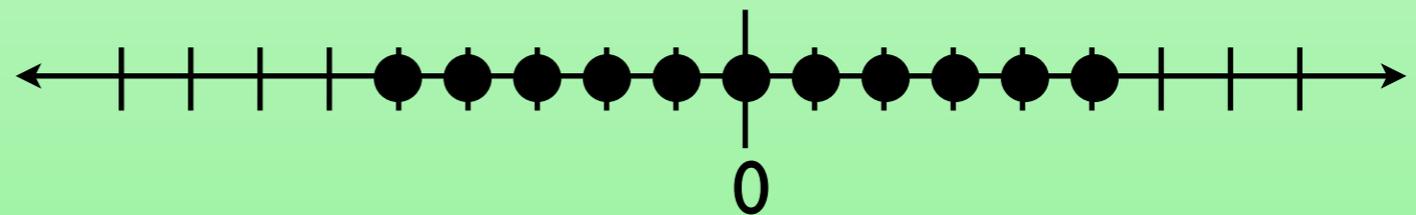
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whole numbers

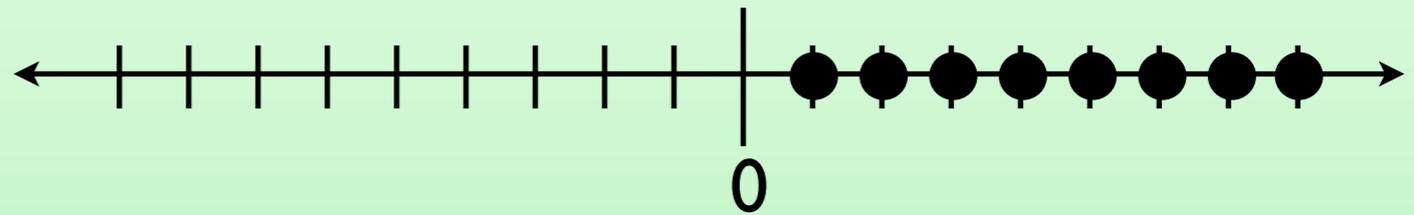


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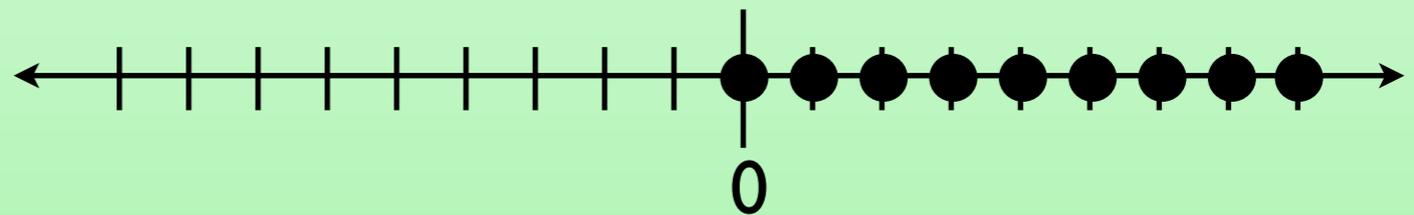


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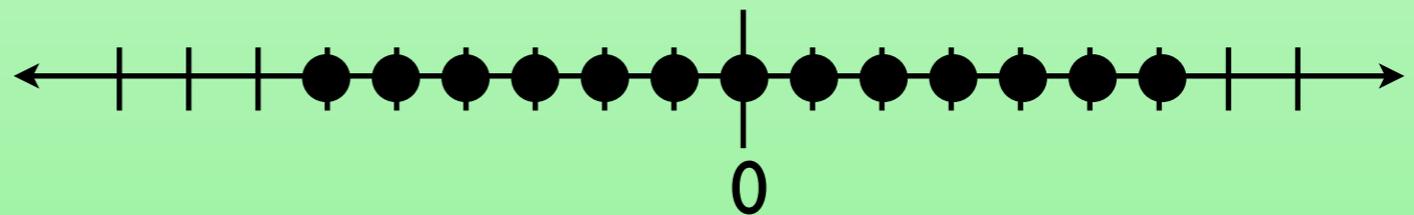
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whole numbers

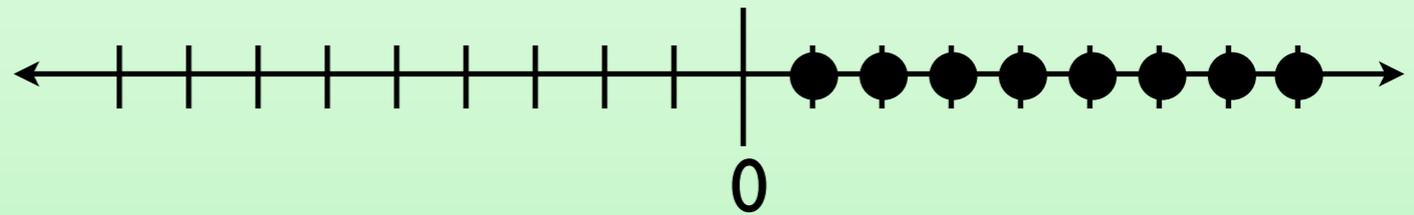


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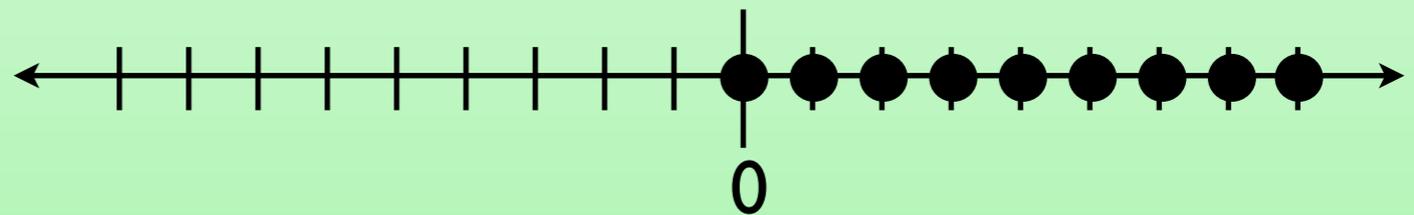


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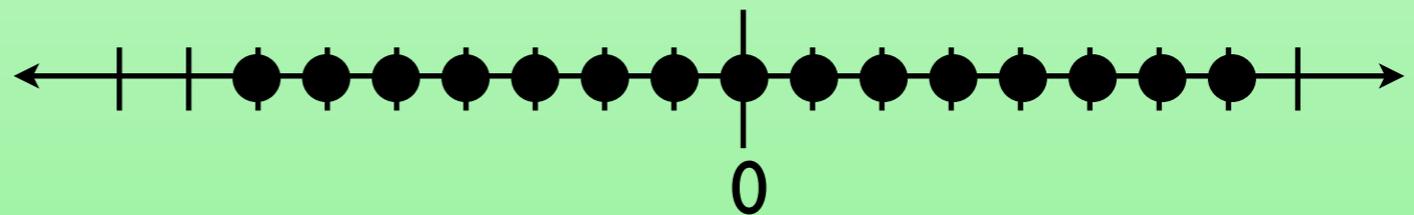
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whole numbers

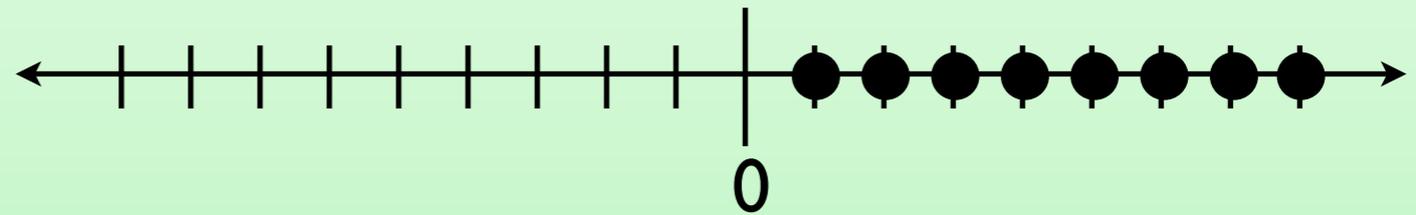


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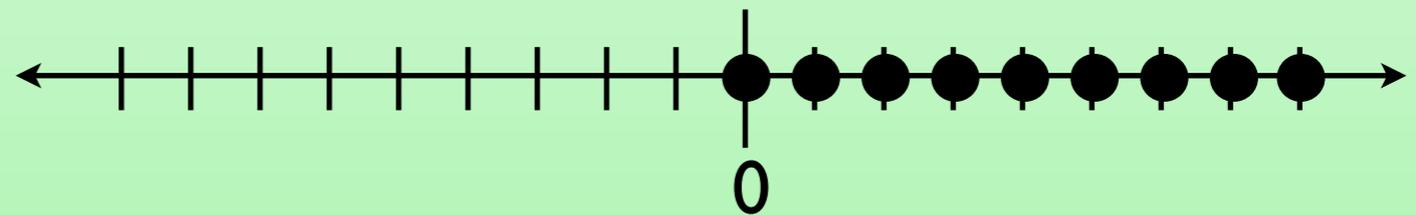


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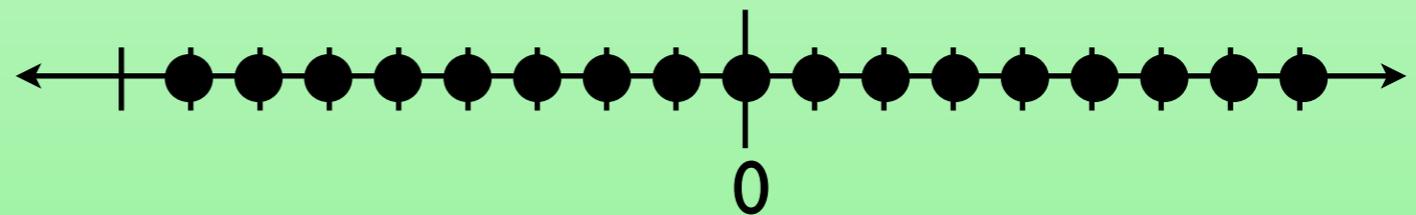
natural numbers



whole numbers

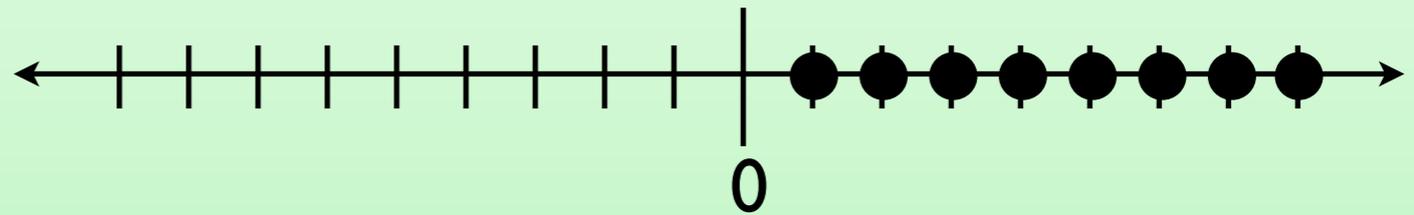


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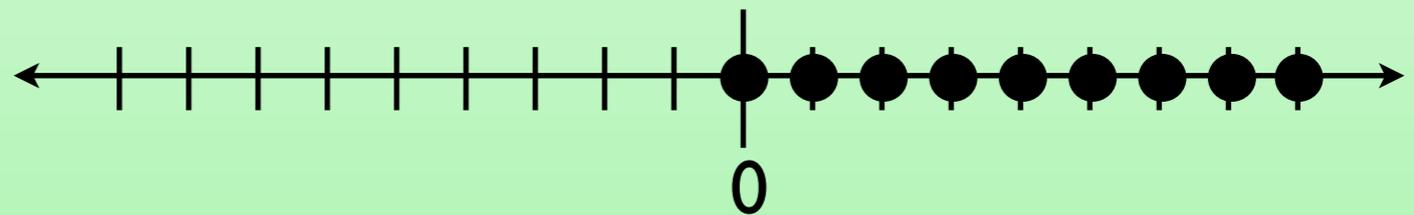


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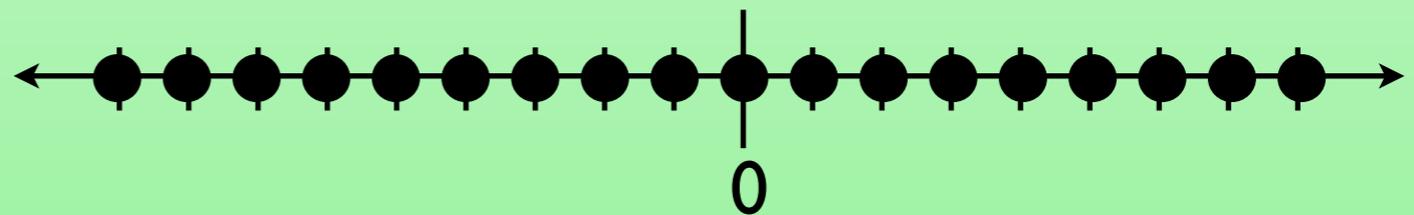
natural numbers



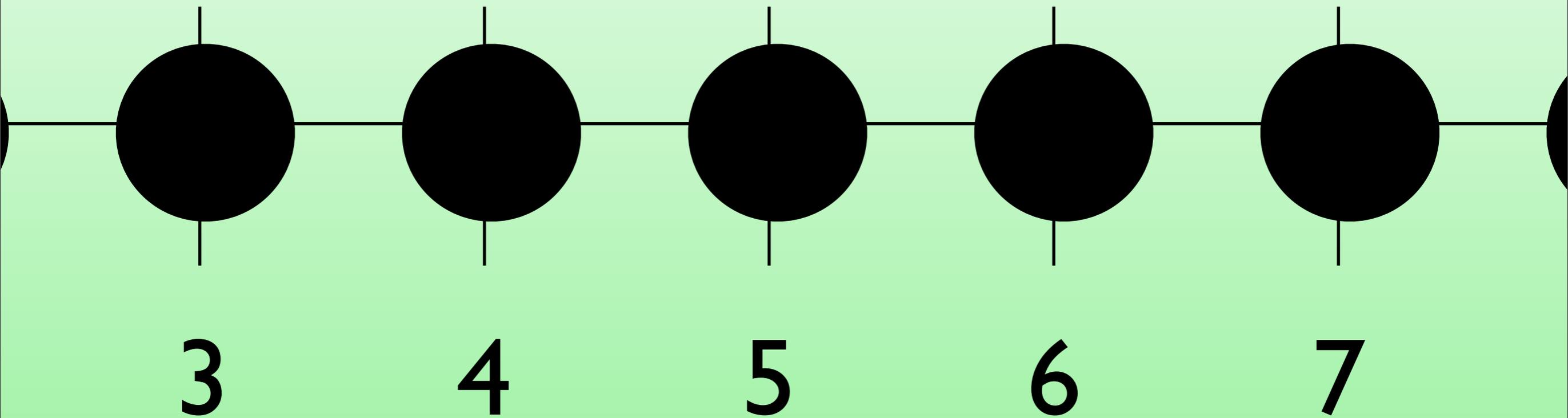
whole numbers



integers

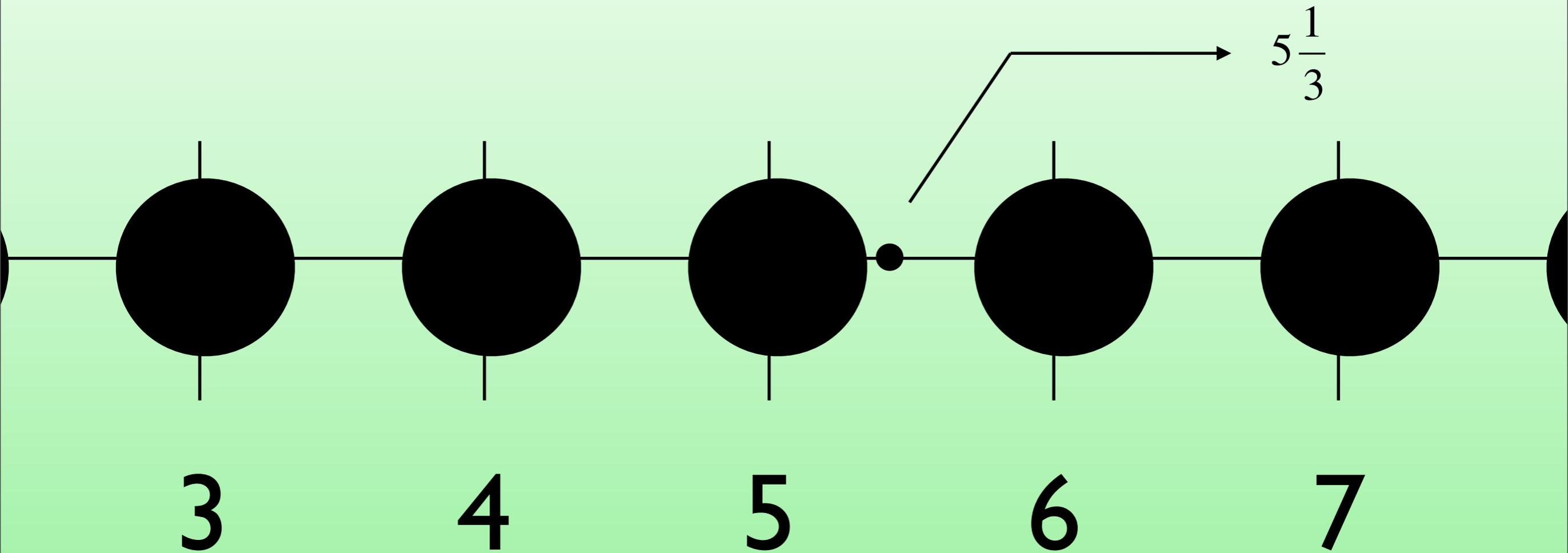


## 2. Kinds of Numbers



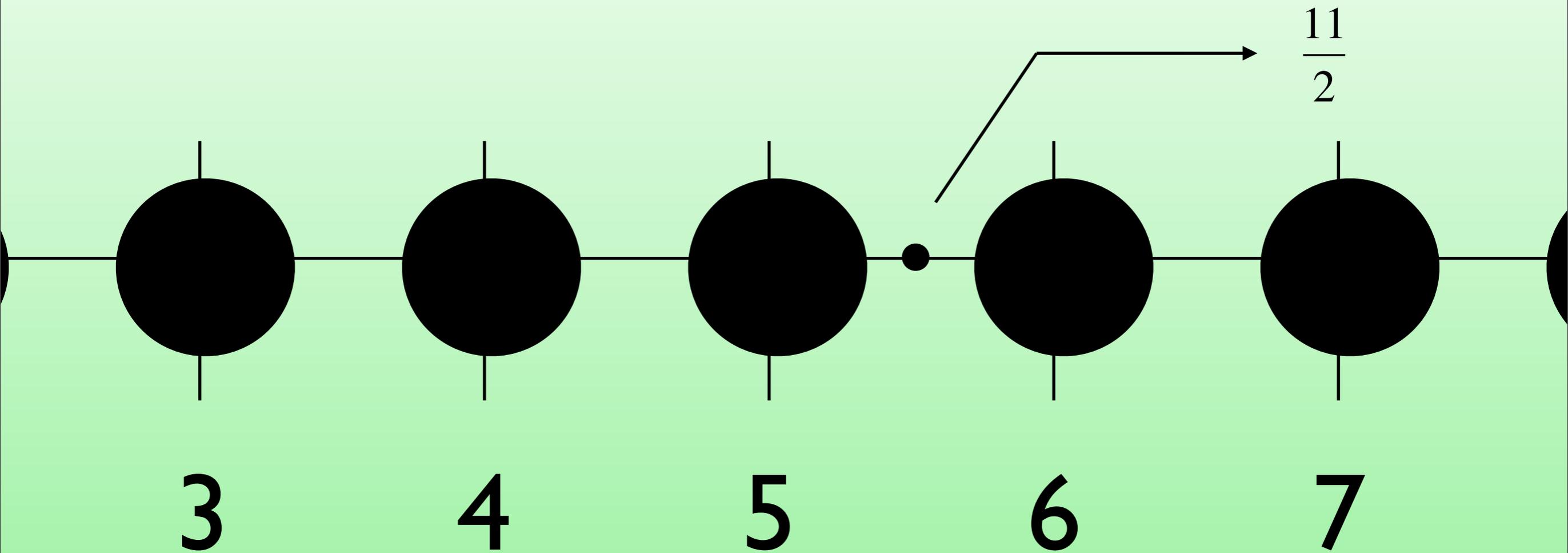
rational numbers

## 2. Kinds of Numbers



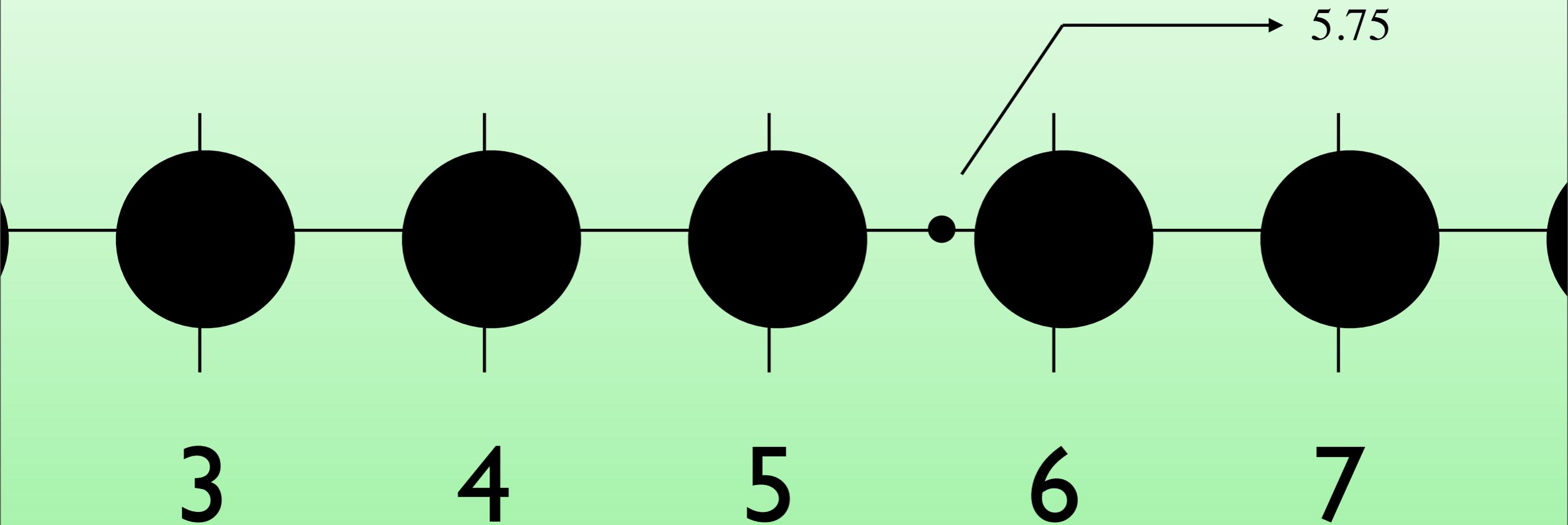
rational numbers

## 2. Kinds of Numbers



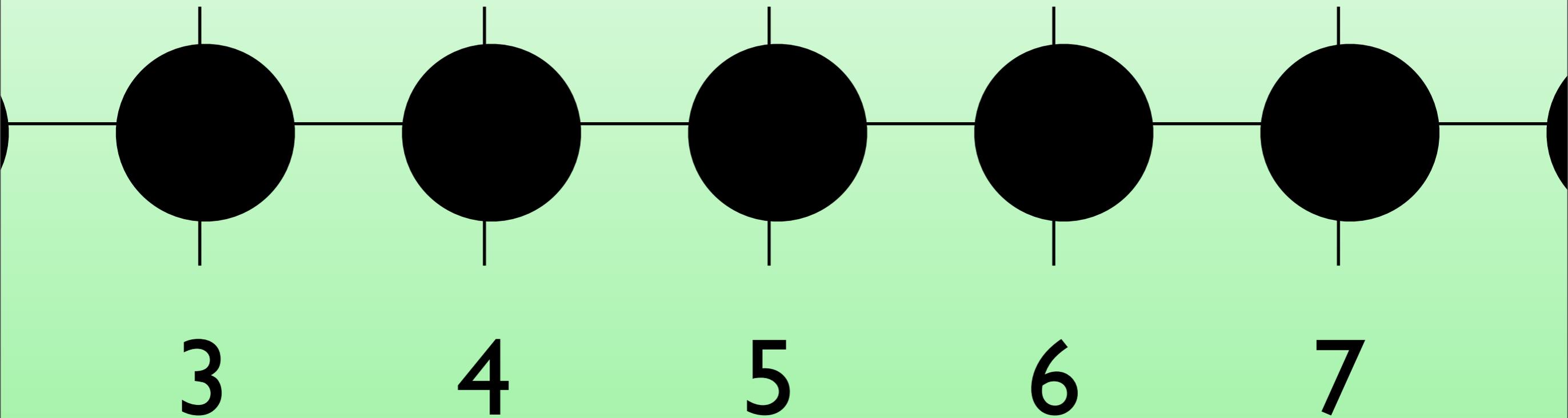
rational numbers

## 2. Kinds of Numbers



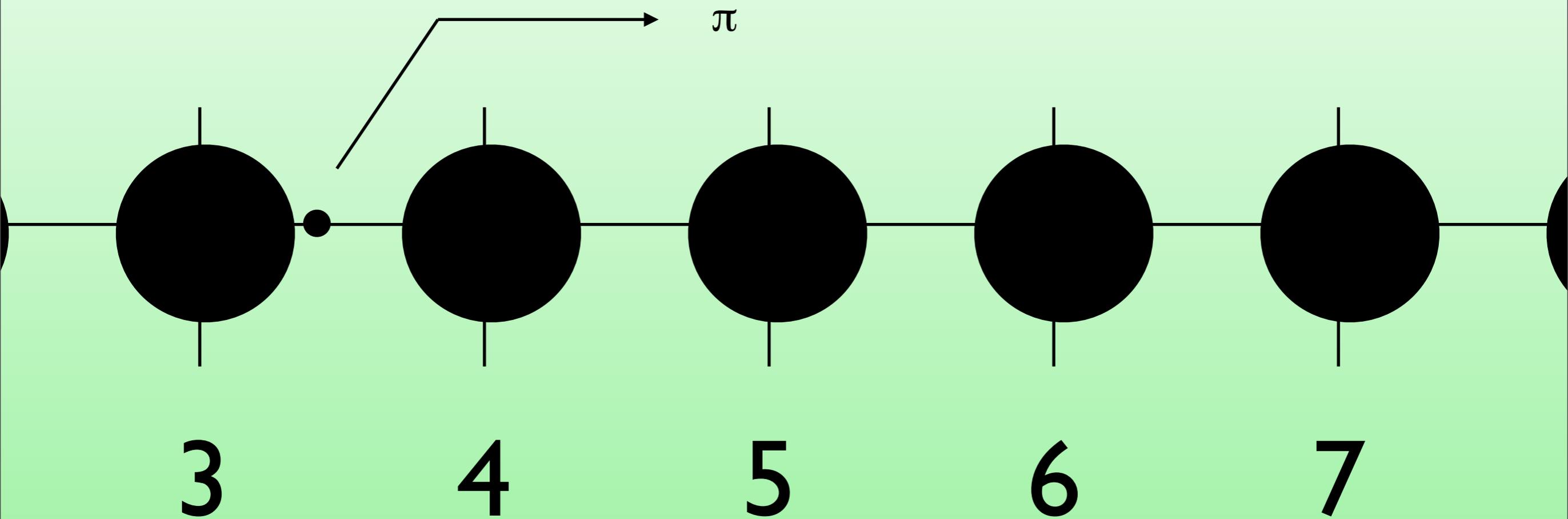
rational numbers

## 2. Kinds of Numbers



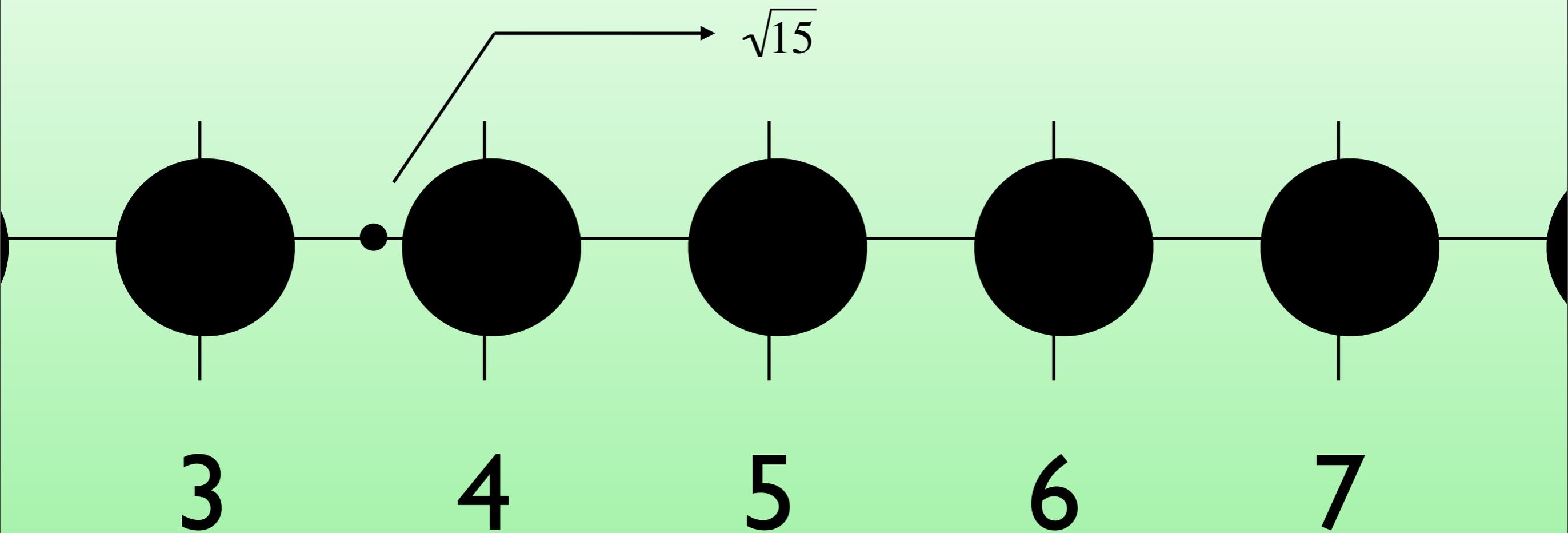
irrational numbers

## 2. Kinds of Numbers



irrational numbers

## 2. Kinds of Numbers



irrational numbers



What kind of number  
is  $-5$ ?

#1

What kind of number  
is  $-5$ ?

#2

What kind of number  
is  $42$ ?

#1

What kind of number  
is -5?

**integer, rational**

#2

What kind of number  
is 42?

# #2

What kind of number  
is 42?

# #3

What kind of number  
is -4.5669?

# #2

What kind of number  
is 42?

**natural, whole,  
integer, rational**

# #3

What kind of number  
is -4.5669?

# #3

What kind of number is  $-4.5669$ ?

# #4

Give an example of a positive integer.

# #3

What kind of number  
is  $-4.5669$ ?

**rational**

# #4

Give an example of a  
positive integer.

# #4

Give an example of a positive integer.

# #5

Give an example of a negative natural number.

# #5

Give an example of a negative natural number.

# #6

Give an example of a whole number that isn't positive.

# #6

Give an example of a whole number that isn't positive.

# #7

What kind of number is most useful to describe:

your shoe size

# #7

What kind of number  
is most useful to  
describe:

your shoe size

# #8

What kind of number  
is most useful to  
describe:

the temperature in a  
news report

# #7

What kind of number  
is most useful to  
describe:

your shoe size

**rational**

# #8

What kind of number  
is most useful to  
describe:

the temperature in a  
news report

# #8

What kind of number  
is most useful to  
describe:

the temperature in a  
news report

# #9

What kind of number  
is most useful to  
describe:

the number of  
siblings a person has

# #8

What kind of number  
is most useful to  
describe:

the temperature in a  
news report

**integers**

# #9

What kind of number  
is most useful to  
describe:

the number of  
siblings a person has

# #9

What kind of number is most useful to describe:

the number of siblings a person has

# #10

True or false:

Every rational number is also an integer.

If false, give a counterexample.

# #9

What kind of number is most useful to describe:

the number of siblings a person has

**whole**

# #10

True or false:

Every rational number is also an integer.

If false, give a counterexample.

# I O

True or false:

Every rational number is also an integer.

If false, give a counterexample.

# I I

True or false:

Every whole number is also a natural number.

If false, give a counterexample.

# | 0

True or false:

Every rational number is also an integer.

If false, give a counterexample.

**false**

# | |

True or false:

Every whole number is also a natural number.

If false, give a counterexample.

# | |

True or false:

Every whole number  
is also a natural  
number.

If false, give a  
counterexample.

# | 2

True or false:

Every natural number  
is also a rational  
number.

If false, give a  
counterexample.

# | |

True or false:

Every whole number  
is also a natural  
number.

If false, give a  
counterexample.

**false**

# | 2

True or false:

Every natural number  
is also a rational  
number.

If false, give a  
counterexample.

# #12

True or false:

Every natural number is also a rational number.

If false, give a counterexample.

# #13

True or false:

Every negative number is also an integer.

If false, give a counterexample.

# #12

True or false:

Every natural number is also a rational number.

If false, give a counterexample.

**true**

# #13

True or false:

Every negative number is also an integer.

If false, give a counterexample.

# #13

True or false:

Every negative number is also an integer.

If false, give a counterexample.

# #13

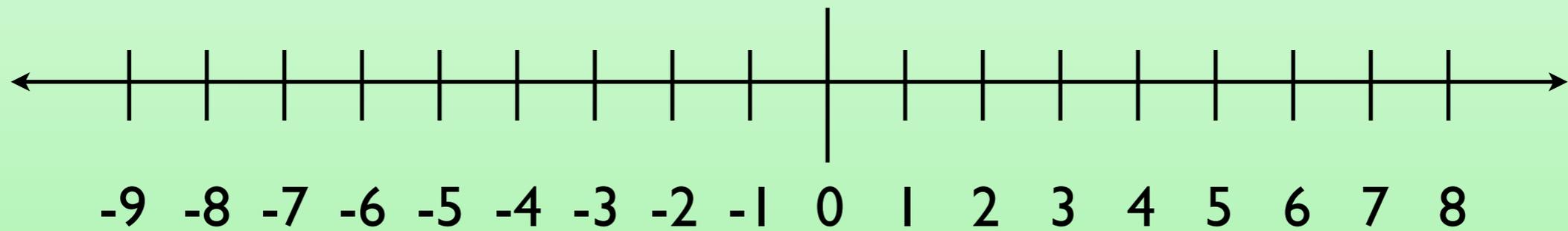
True or false:

Every negative number is also an integer.

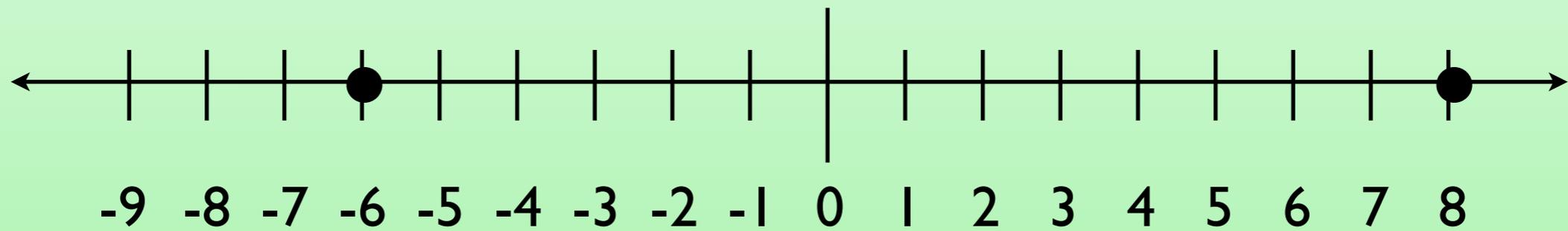
If false, give a counterexample.

**true**

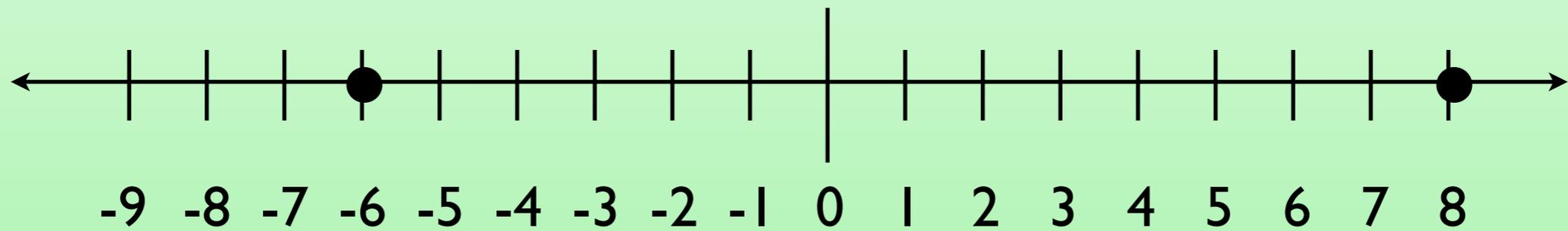
## 2. Kinds of Numbers



## 2. Kinds of Numbers

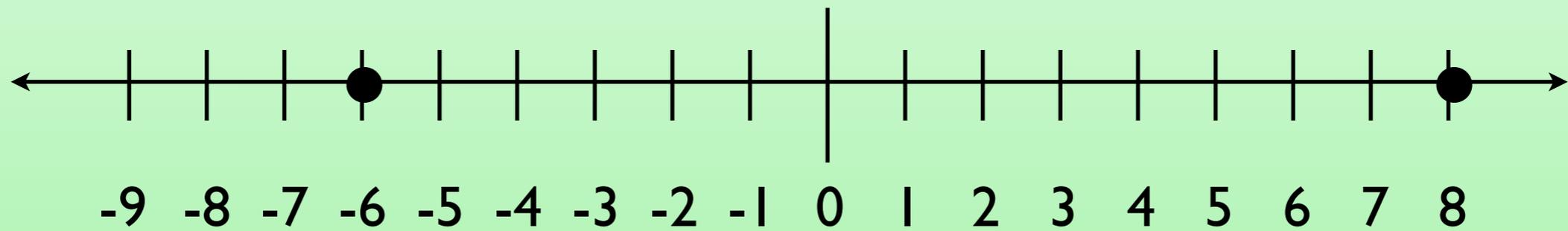


## 2. Kinds of Numbers



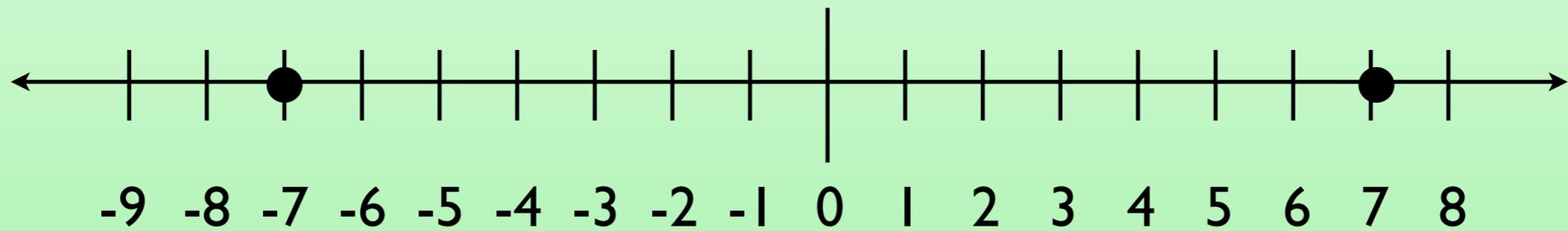
8  -6

## 2. Kinds of Numbers



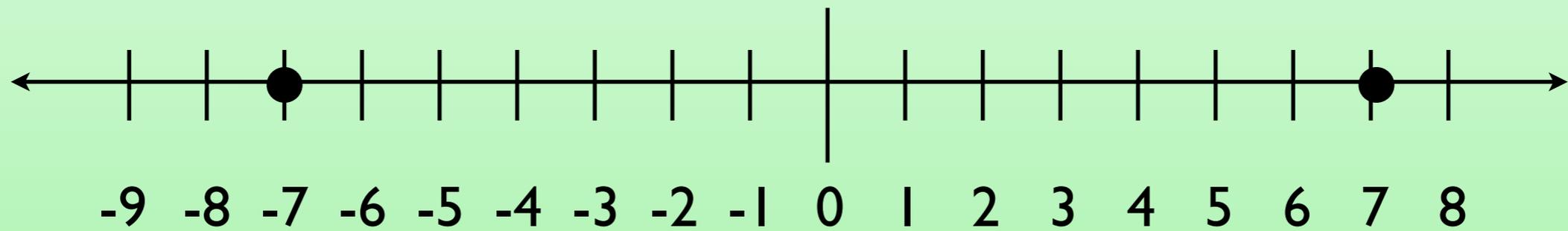
$$8 > -6$$

## 2. Kinds of Numbers



$$-7 \square 7$$

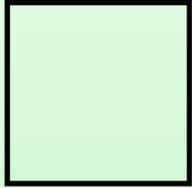
## 2. Kinds of Numbers



$$-7 < 7$$

#14

-7

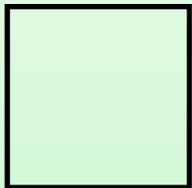


10



#14

-7



10

^



#14

-7

10

#15

-5 + 10

10 - 5

^

# #15

$$-5 + 10 \quad \square \quad 10 - 5$$

# #16

$$10 \cdot 2^2 \quad \square \quad 2 \cdot 4^2$$

# #15

$$-5 + 10 \quad \square \quad 10 - 5$$

=

# #16

$$10 \cdot 2^2 \quad \square \quad 2 \cdot 4^2$$

#16

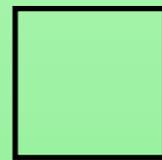
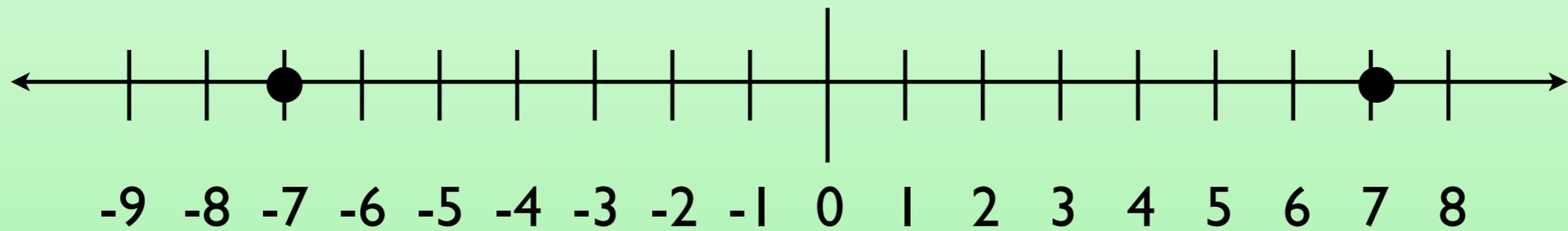
$$10 \cdot 2^2 \quad \square \quad 2 \cdot 4^2$$

#16

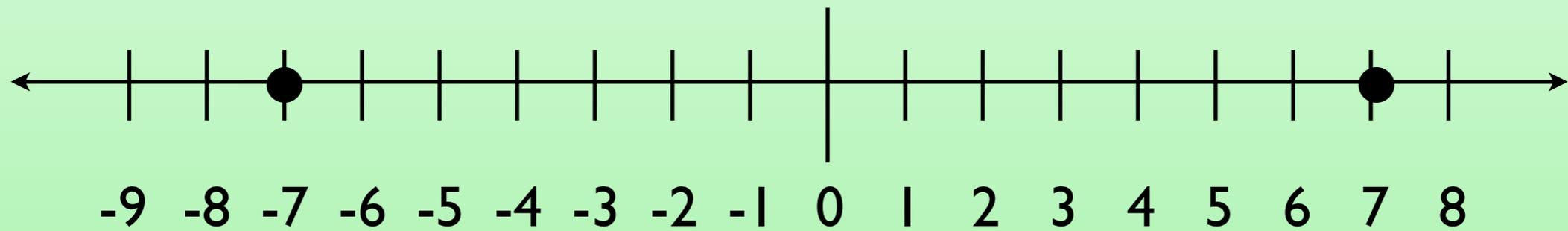
$$10 \cdot 2^2 \quad \square \quad 2 \cdot 4^2$$

>

## 2. Kinds of Numbers



## 2. Kinds of Numbers



$$|-7| \square |7|$$

## 2. Kinds of Numbers



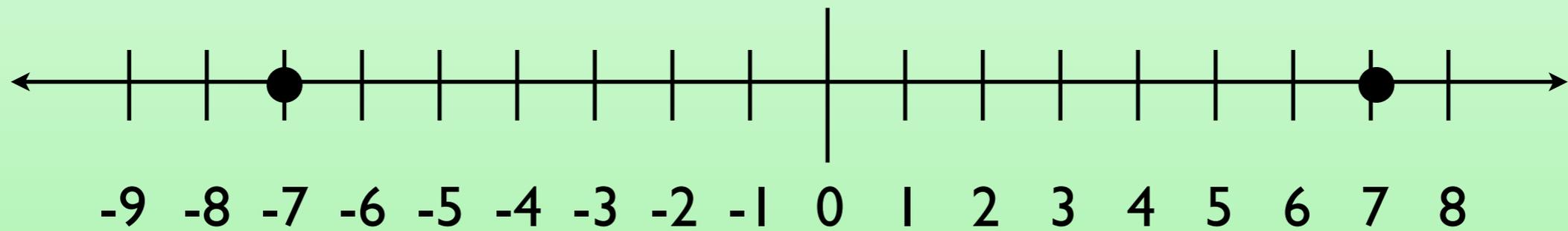
## 2. Kinds of Numbers



## 2. Kinds of Numbers

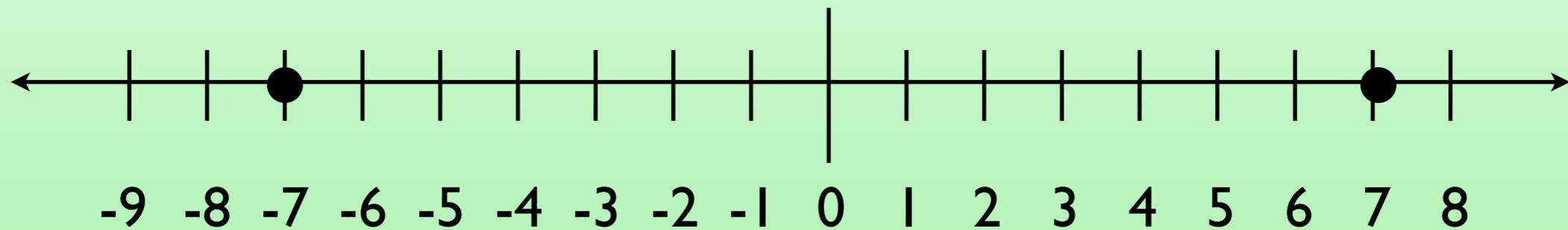


## 2. Kinds of Numbers



$$|-7| \square |7|$$

## 2. Kinds of Numbers



$$|-7| = 7$$

## 2. Kinds of Numbers

$$|2 - 7|$$

## 2. Kinds of Numbers

$$-4|2 - 7|^2$$

# #17

$$4 + |3 - 1|$$

# #17

$$4 + |3 - 1|$$

**6**

#17

$$4 + |3 - 1|$$

**6**

#18

$$-|38 - 41 + 6|$$

# #18

$$-|38 - 41 + 6|$$

# #19

$$-(|24| - |-4|)$$

# #18

$$-|38 - 41 + 6|$$

**-3**

# #19

$$-(|24| - |-4|)$$

# #19

$$-(|24| - |-4|)$$

# #20

$$|12| \cdot (|-4|)$$

# #19

$$-(|24| - |-4|)$$

**-20**

# #20

$$|12| \cdot (|-4|)$$

# #20

$$|12| \cdot (-|-4|)$$

# #21

$$-|-6 + 4| + |3|$$

# #20

$$|12| \cdot (-|-4|)$$

**-48**

# #21

$$-|-6 + 4| + |3|$$

# #21

$$-|-6 + 4| + |3|$$

# #21

$$-|-6 + 4| + |3|$$

**1**

## **7. Classwork**

pg. 60 // #16 - 23,

pg. 60 // #29 - 37,

pg. 62 // #25 - 32

## Practice

Simplify:

$$16 - 4|4 - 8| =$$

## Challenge

Simplify:

$$(-|4 - 8|)^2 - 16 =$$

## 8. Homework

### Practice

Simplify:

$$16 - 4|4 - 8| =$$

### Challenge

Simplify:

$$(-|4 - 8|)^2 - 16 =$$