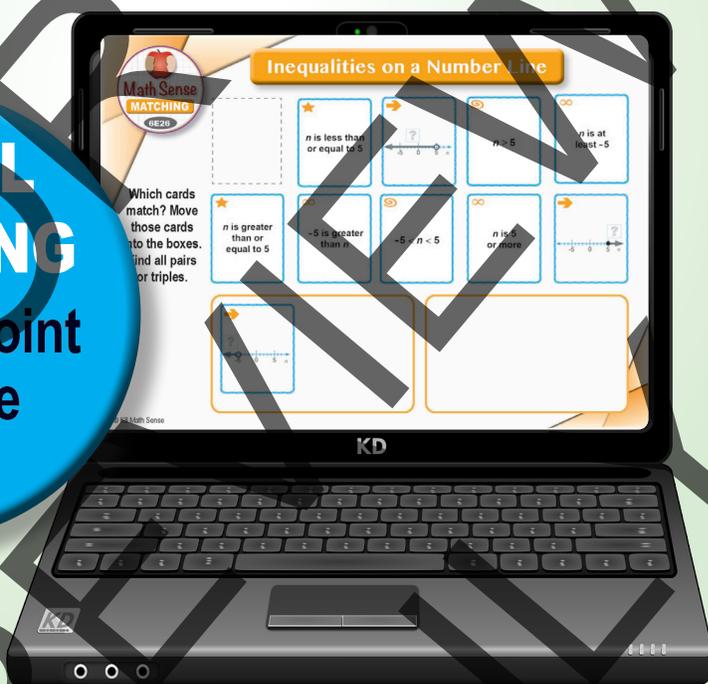




Inequalities on a Number Line

**DIGITAL
MATCHING**
15 PowerPoint
& Google
Slides



6E26

Description of Slides

Slides 1-3: On each slide, students sort 12 cards into three matching groups of four cards each. There are 36 unique card images in all, nine groups of four. Each suit (stars, arrows, spirals, infinity) has a different type of representation.

Slides 4-9: Students view six cards and choose two cards that match each other. The card images are the same as on Slides 1-3.

Slides 10-15: Students view ten cards and search for matching pairs or triples. These are more challenging than Slides 4-9.

Slides are independent, so assign as many as you want.

HOW TO USE

- **Distance Learning.** The onscreen cards are an alternative to printable math cards. (See the related resource with the same title and other digital slides with the same format.)
- **PowerPoint.** Students can sort and match various card images on the screen. See the file 6E26_Matching_15p.ppt. A second PPT file has the cards already matched. See the file 6E26_Matching_Ans_15p.ppt. A printable answer key for reference is also available in this PDF.
- **Google Slides.** Open your Google Drive, choose NEW and upload the PPT files. These are compatible with Slides files and can be assigned to students. Save your original PowerPoint files in case you need to restore them.
- **Recording Sheet.** When students finish the onscreen matching activity, you may want to assign a recording sheet. See the included sheet with an answer key.
- **Follow-Up Games.** The printable cards, available separately, can be used to play four fun, engaging games. These are great for a tutor, parent, or aide to play with one student or with a small group. Multiple variations provide review throughout the year.
- **Why are there only nine different values, or problems?** As students repeat the same problems with various representations, students will gain fluency and develop math sense! After mastering those problems, students will remember and be more successful when applying the concept to more difficult problems.

About the Author & Illustrator

Angie Seltzer is a mathematics curriculum specialist who designs and develops time-saving products for teachers. She holds a master's degree in mathematics education from The Ohio State University.

Angie has more than 30 years of professional publishing experience as an editor, writer, and/or designer of math textbooks and supplements including assessments. She also has more than 10 years of math tutoring experience.

Digital Matching: Inequalities on a Number Line 6E26 (Published 03/03/2021)

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About Card Set 6E26

Mathematics Content

- Each “star” card shows an inequality in words and the related “infinity” card shows another wording.
- The “spiral” cards show inequalities with symbols.
- Each “arrow” card shows a graph with an endpoint at 5 or -5 with either a dot or an open circle.

Meaning of Set Code 6E26

The code stands for Grade 6, Equations, Cluster 2, Goal 6 in the Grade 6 goals checklist by Angie Seltzer.

Making Generalizations

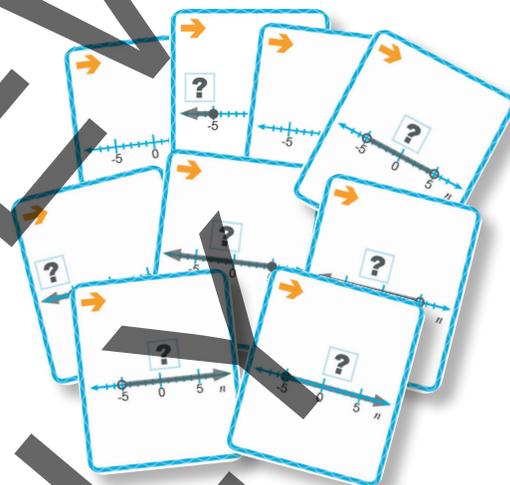
This card set will also help students make generalizations such as the following.

- When graphing an inequality, show a dot when the endpoint is included. Show an open circle when the endpoint is not included.
- On a number line, greater numbers are always to the right of lesser numbers.
- If you want to trade the two sides of an inequality such as $5 > x$, you will need to reverse the symbol ($x < 5$)

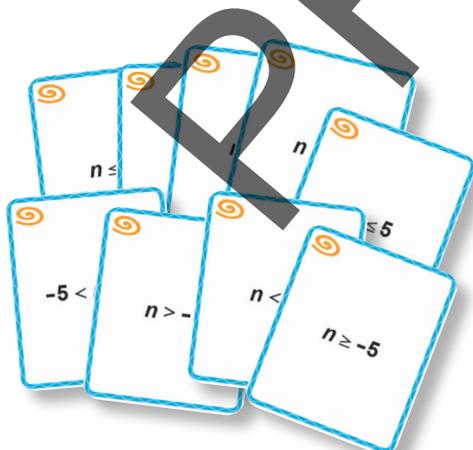
The same 36 cards shown on the digital slides are available separately as a set of printable cards with game instructions.



Stars



Arrows



Spirals



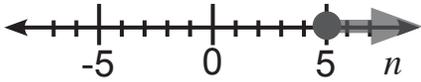
Infinity

Inequalities on a Number Line

Instructions: Draw the graph and write the inequality using symbols. Then write the inequality another way using words.

Sample:

n is greater than or equal to 5

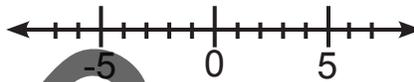


$n \geq 5$

n is 5 or more

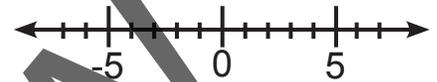
1

n is less than or equal to -5



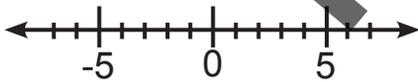
2

n is greater than 5



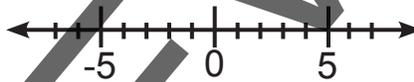
3

n is greater than or equal to -5



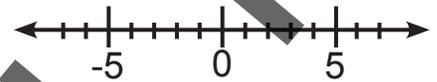
4

n is less than -5



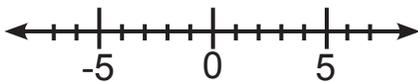
5

n is less than or equal to 5



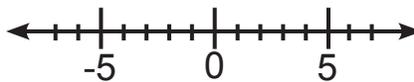
6

n is greater than -5



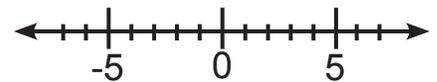
7

n is less than 5



8

n is greater than -5 and less than 5

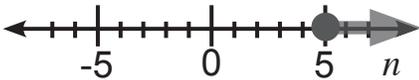


Inequalities on a Number Line

Instructions: Draw the graph and write the inequality using symbols.
Then write the inequality another way using words.

Sample:

n is greater than or equal to 5

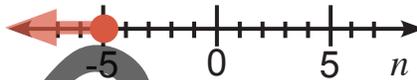


$$n \geq 5$$

n is 5 or more

1

n is less than or equal to -5

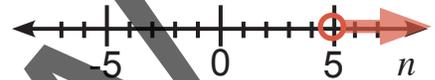


$$n \leq -5$$

n is at most -5

2

n is greater than 5

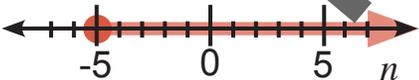


$$n > 5$$

5 is less than n

3

n is greater than or equal to -5

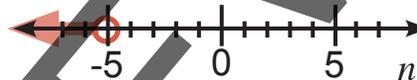


$$n \geq -5$$

n is at least -5

4

n is less than -5

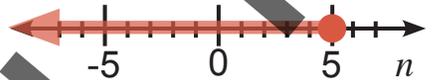


$$n < -5$$

-5 is greater than n

5

n is less than or equal to 5

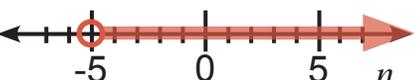


$$n \leq 5$$

n is 5 or less

6

n is greater than -5

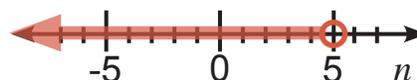


$$n > -5$$

-5 is less than n

7

n is less than 5

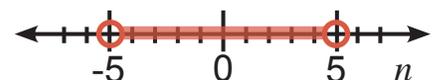


$$n < 5$$

5 is greater than n

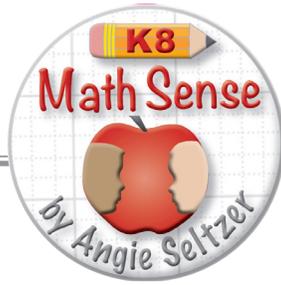
8

n is greater than -5 and less than 5



$$-5 < n < 5$$

n is more than -5
and less than 5



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