

Home Math Program

Perception of Numbers
Infant through Preschool



Math Diamonds

Flashcards from 1 - 50, colored black

www.InternationalParentingAssociation.org

Home Math Program

Math Diamonds Flashcards 1 - 53

Recommended for babies
Flashcards are colored black

Introduction to Math Diamonds

Math Diamonds help the child develop the ability to perceive numbers. Child development specialists say numbers perception should be learned before introducing numerals. If you show the child a picture of one diamond or ten diamonds and say the numerals, the child will know what it means when you introduce the numerals. He will know how many comprises one or ten.

The diamonds are randomly placed because it is recommended by Glenn Doman that in order to develop numbers perception objects should be randomly placed, as otherwise the child would be memorizing patterns and would not be truly learning to perceive how many objects there are on a page. Doman says that children who have developed numbers perception can look at a field of cattle and tell you how many cows are in the field simply by looking at them, without counting them.

How to Assemble the Flashcards

Print flashcards and use card stock or poster board for backing. Match the diamonds to the numerals. The number of diamonds shown on a page are indicated at the bottom of the page in light gray numerals. Slip the pages, back-to-back, into a sheet protector so that one side of the flashcard shows the diamonds and the other side shows the numerals.

How to Use This Program

- 1) Take the first 10 flashcards, in numerical order, holding them in one hand with the labels facing you. The word “one” should be visible to you, and “two” should be behind it, and so on.
- 2) To show the flashcards start with the number one flashcard and take it from the back of the stack and move it to the front. As the child looks at the diamond, say “one.” (Do not say number one or numeral one.) Repeat the process for flashcards 2 through 10.
- 3) Present the rest of the flashcards in the same manner showing 10 flashcards (or more, or less, depending upon the child's interest) in numerical order.
- 4) After presenting the flashcards several times in numerical order you can show them randomly.

Pointers

- Practice your presentation in front of a mirror until you are comfortable handling flashcards. Do this, first, before presenting flashcards to the child.
- Presentations should be done quickly and smoothly. Ten seconds for ten flashcards is ideal, however, if showing fewer flashcards works better, present fewer flashcards. If more than ten is better, show more; it's up to you. Do what works best for you and your child.
- Leave some time in between sessions and never show more flashcards than the child really wants to see. The rule is to stop before the child has had enough. This way the child will be eager to see the flashcards the next time you offer to give a presentation.

- Make sure there are no distractions when you give a presentation. This would include the TV, music, telephone, noise, interruptions and anything else that you or the child might find disturbing or distracting.
- Before showing flashcards ask the child if he would like to see Math Diamonds flashcards. For the baby, his wholehearted attention is the sign of his consent. Pick a time when the child is not doing something he enjoys; and do not interrupt him.
- See that the lighting is good before you begin a presentation so that the child will not be straining to see the flashcards.
- Hold the flashcards at the child's eye level and hold them steady. Position the flashcards so that the child can view them easily. Hold the flashcards at a distance where he can see the flashcards clearly without straining. For an infant it would be about 18 inches.
- Be positive, happy and joyous when teaching your child, and your child will have a positive, happy and joyous attitude towards learning. Both you and the child should be in a good mood when you show flashcards. Otherwise wait until you are both feeling happy and well.
- The following are links to two articles that contain guidelines on the subject of flashcards:

<http://www.InternationalParentingAssociation.org/Learning/accelerate.htm>

<http://www.InternationalParentingAssociation.org/Learning/flashcards.html>

We hope you and your child will enjoy using Math Diamonds. The importance of gaining math skills cannot be overstated.



one



two



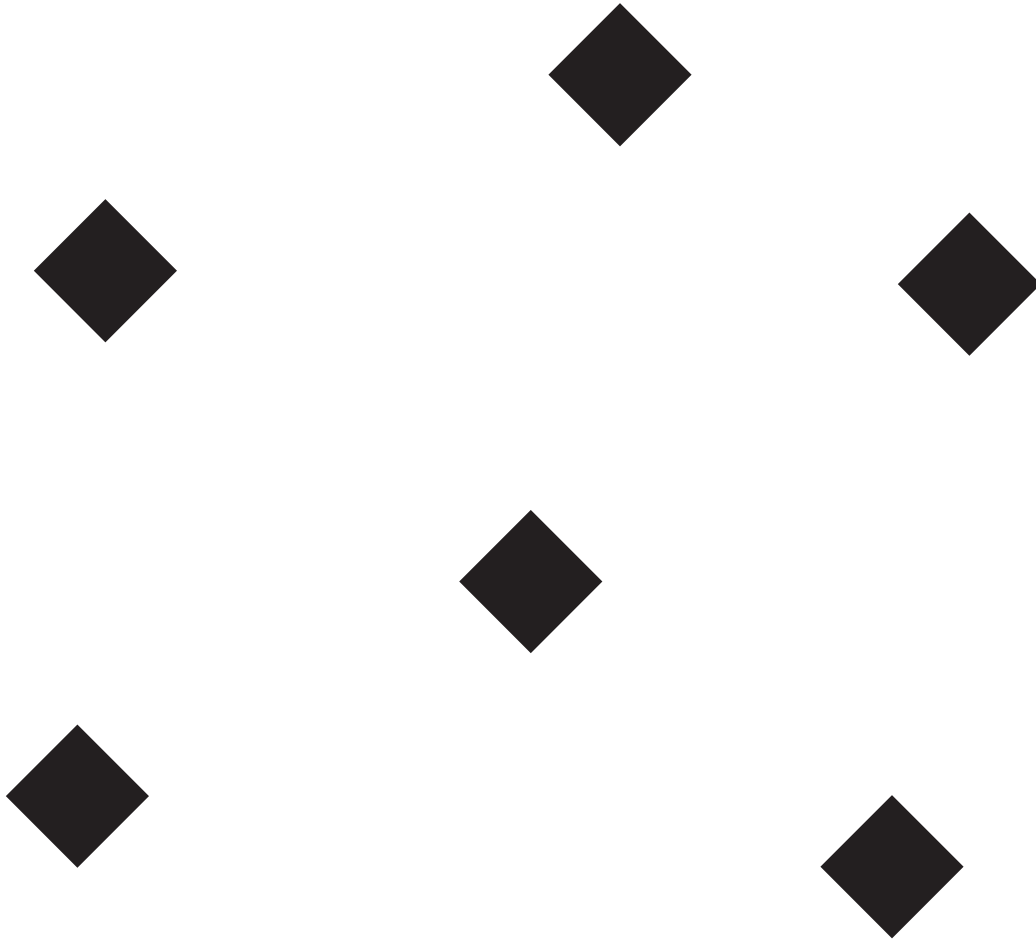
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four



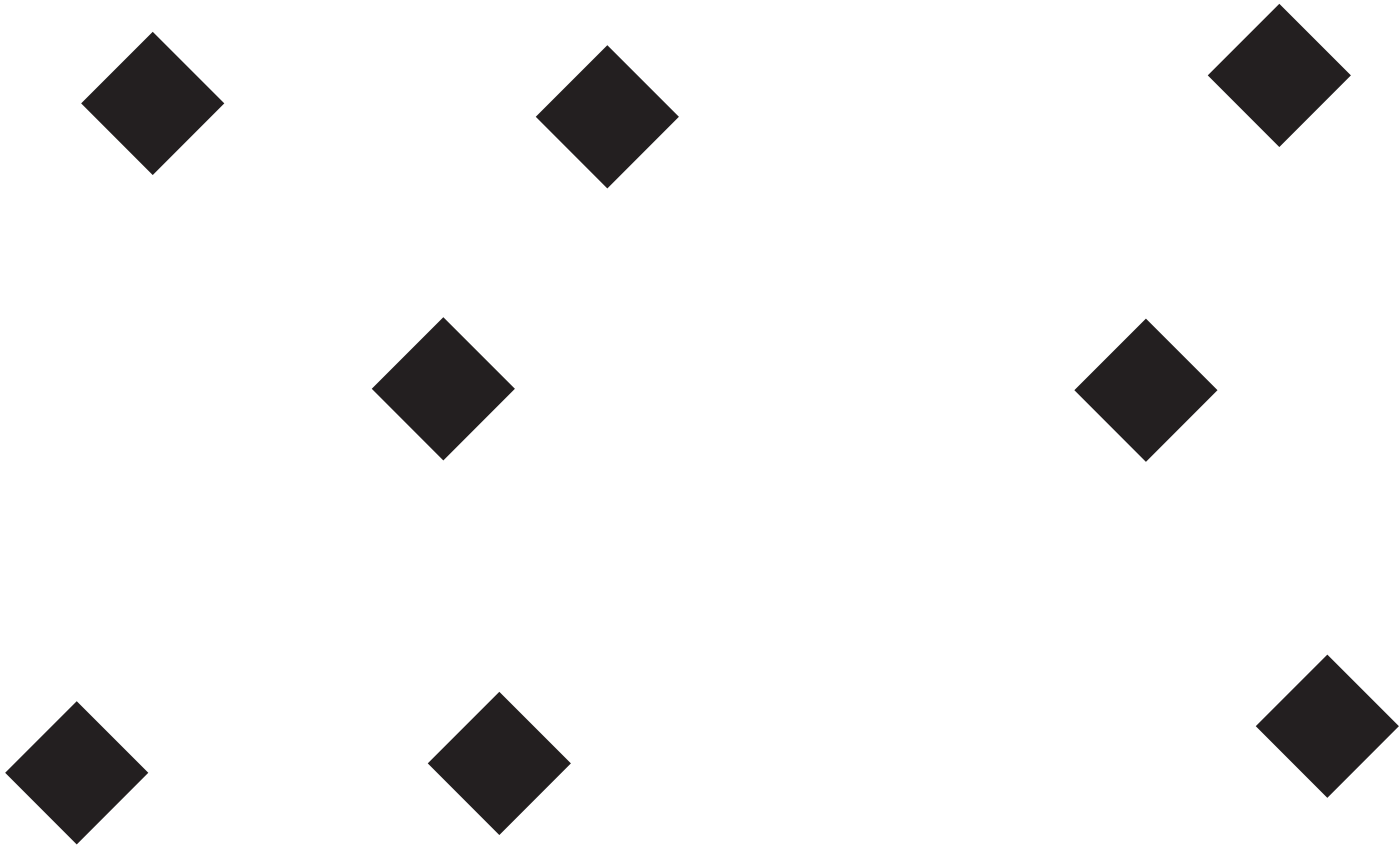
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six



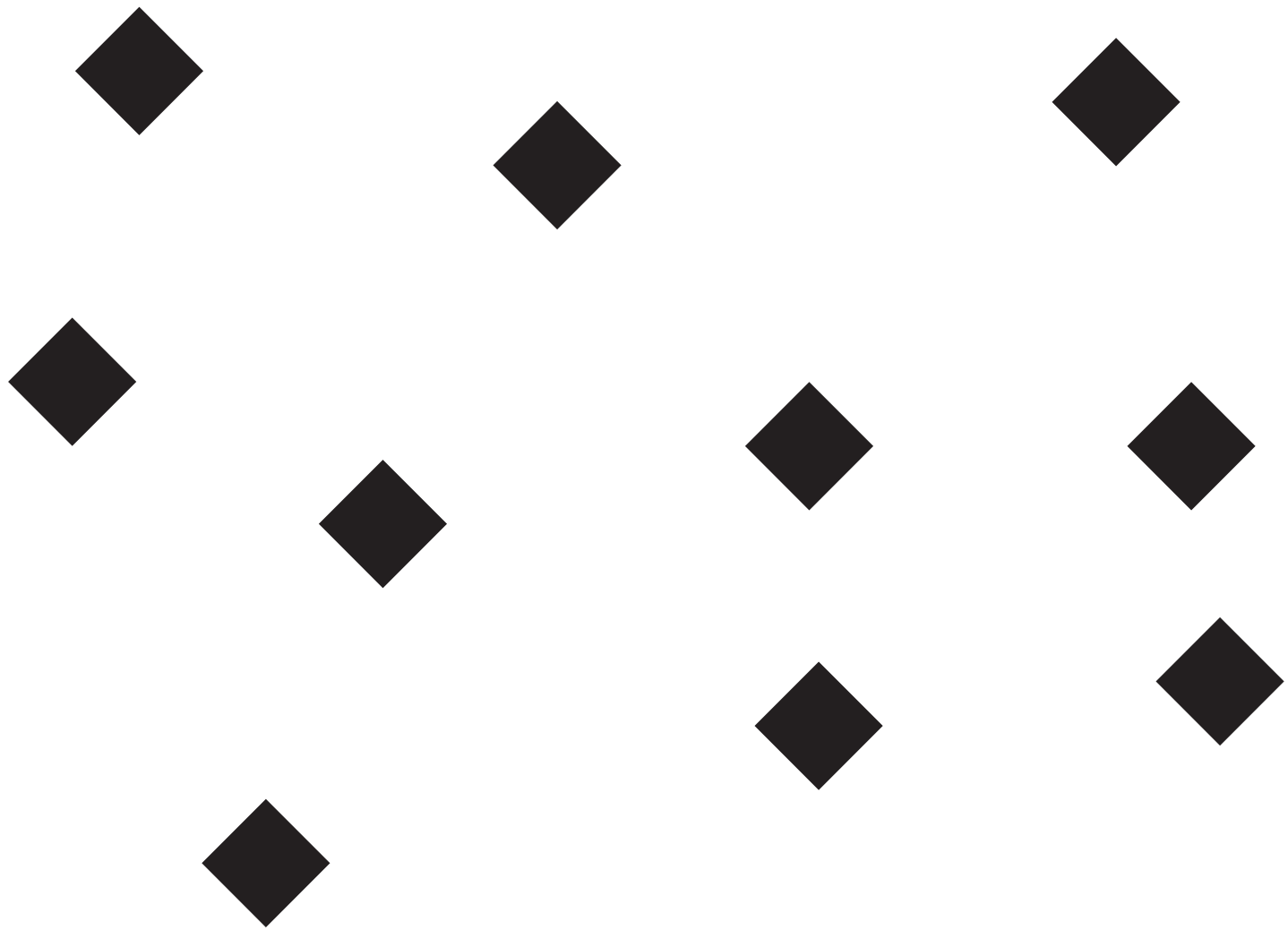
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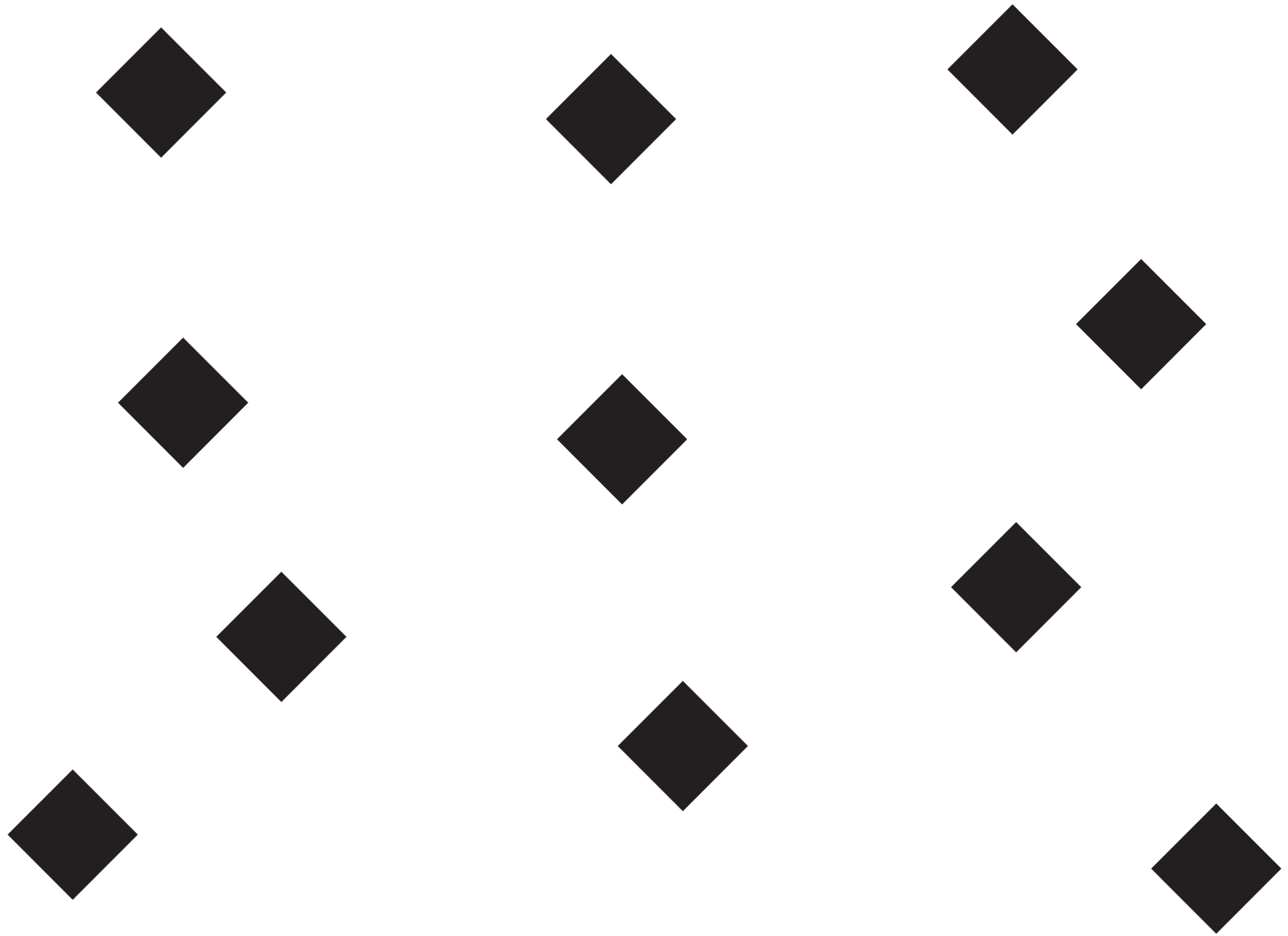
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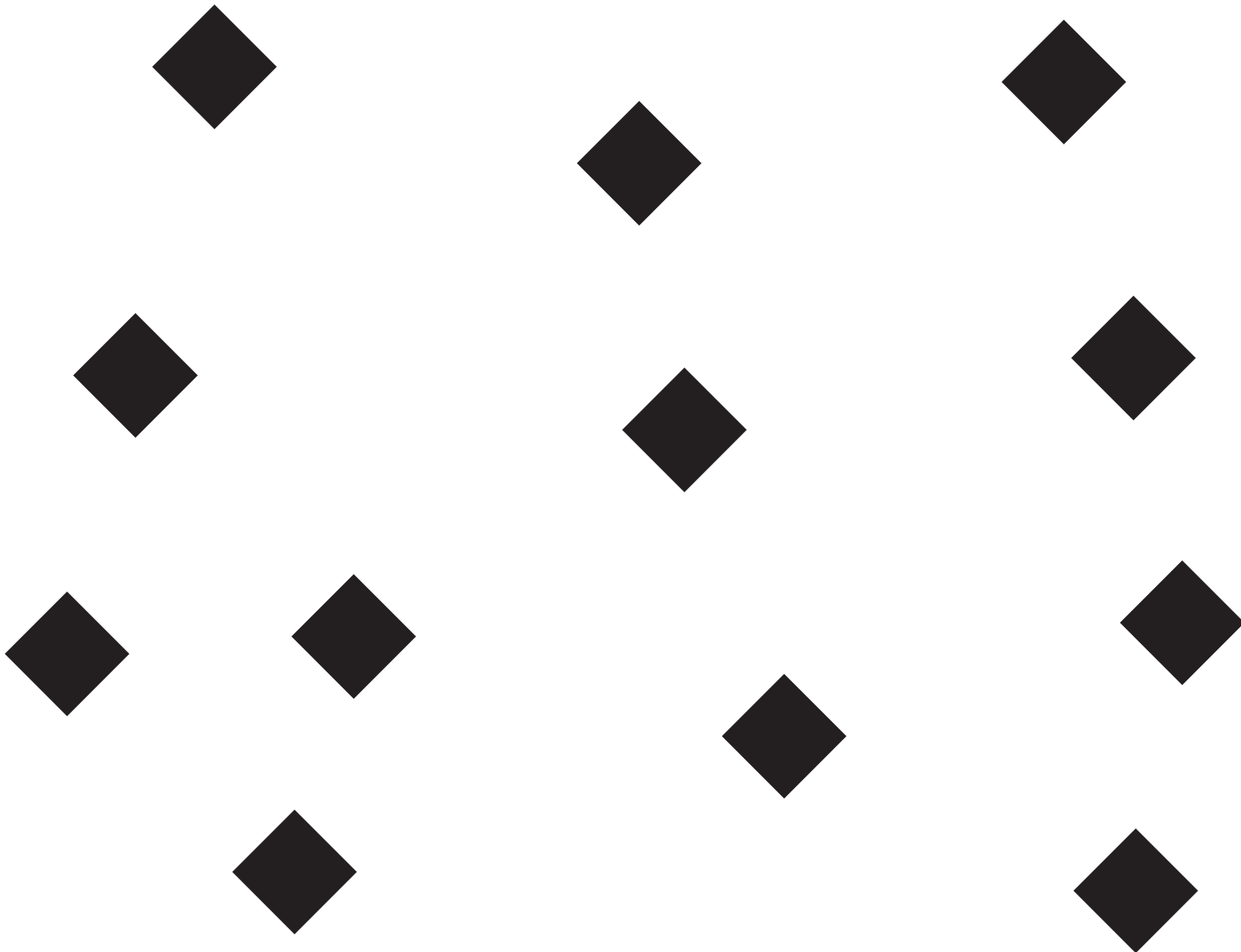
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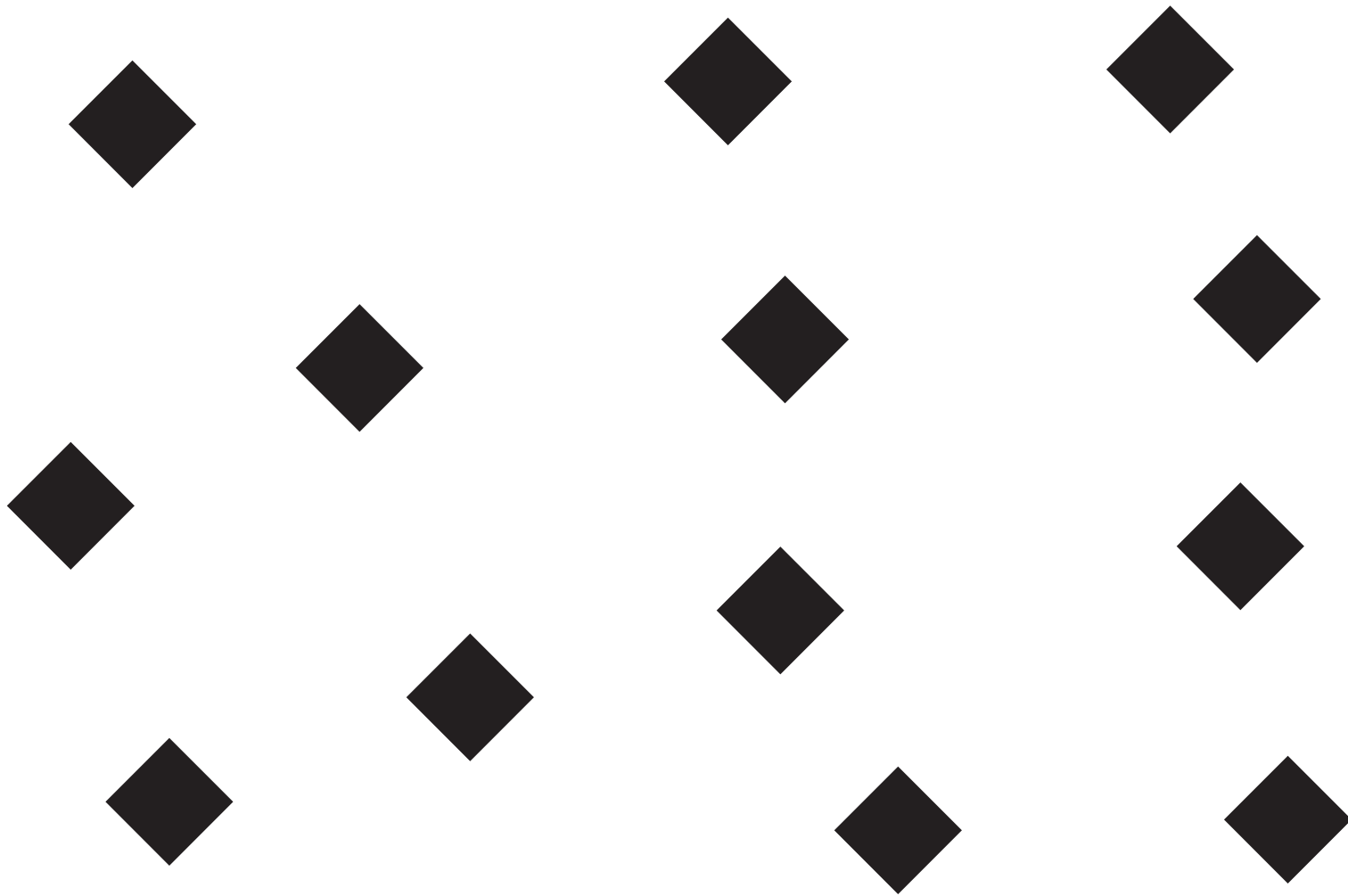
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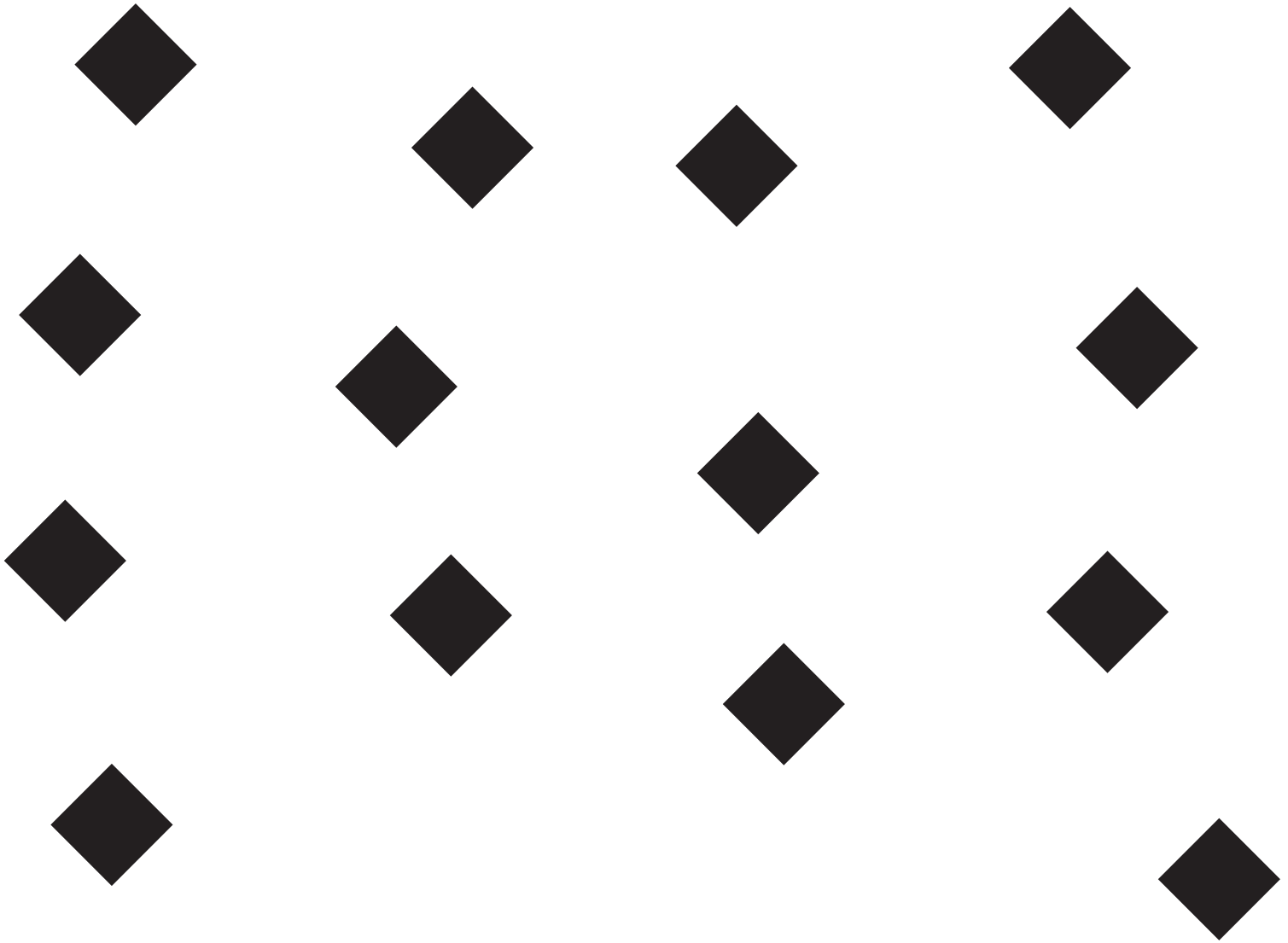
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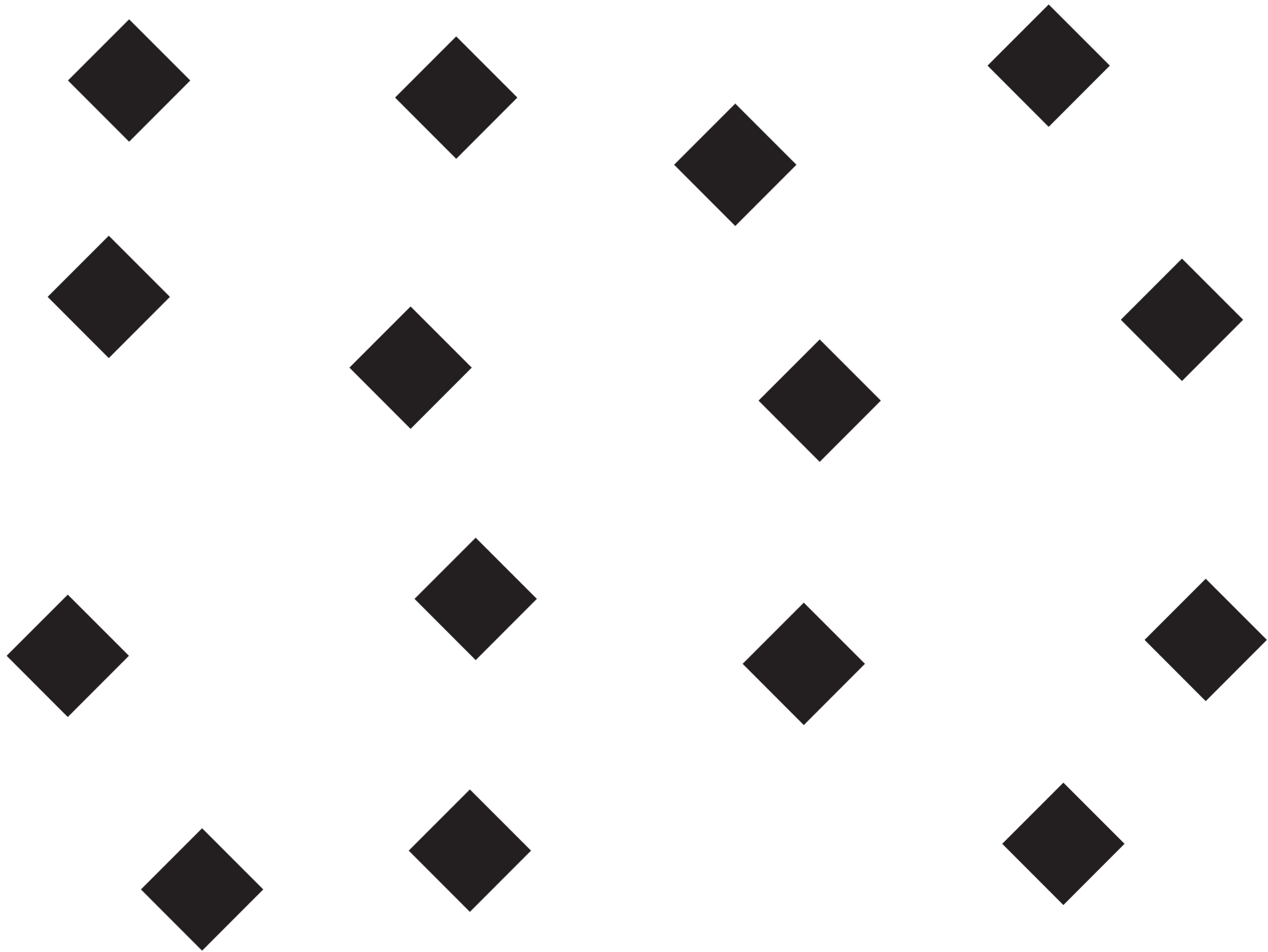
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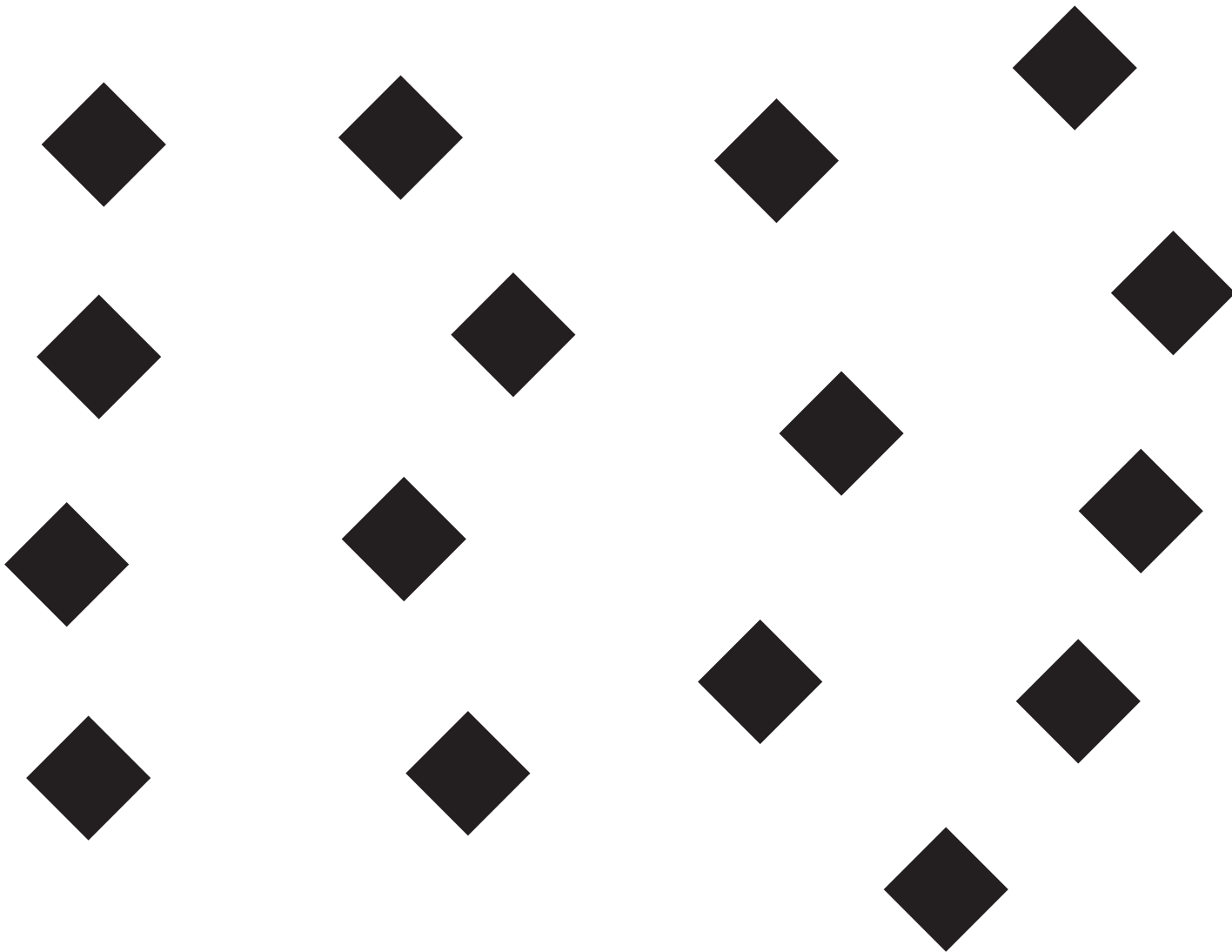
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fourteen



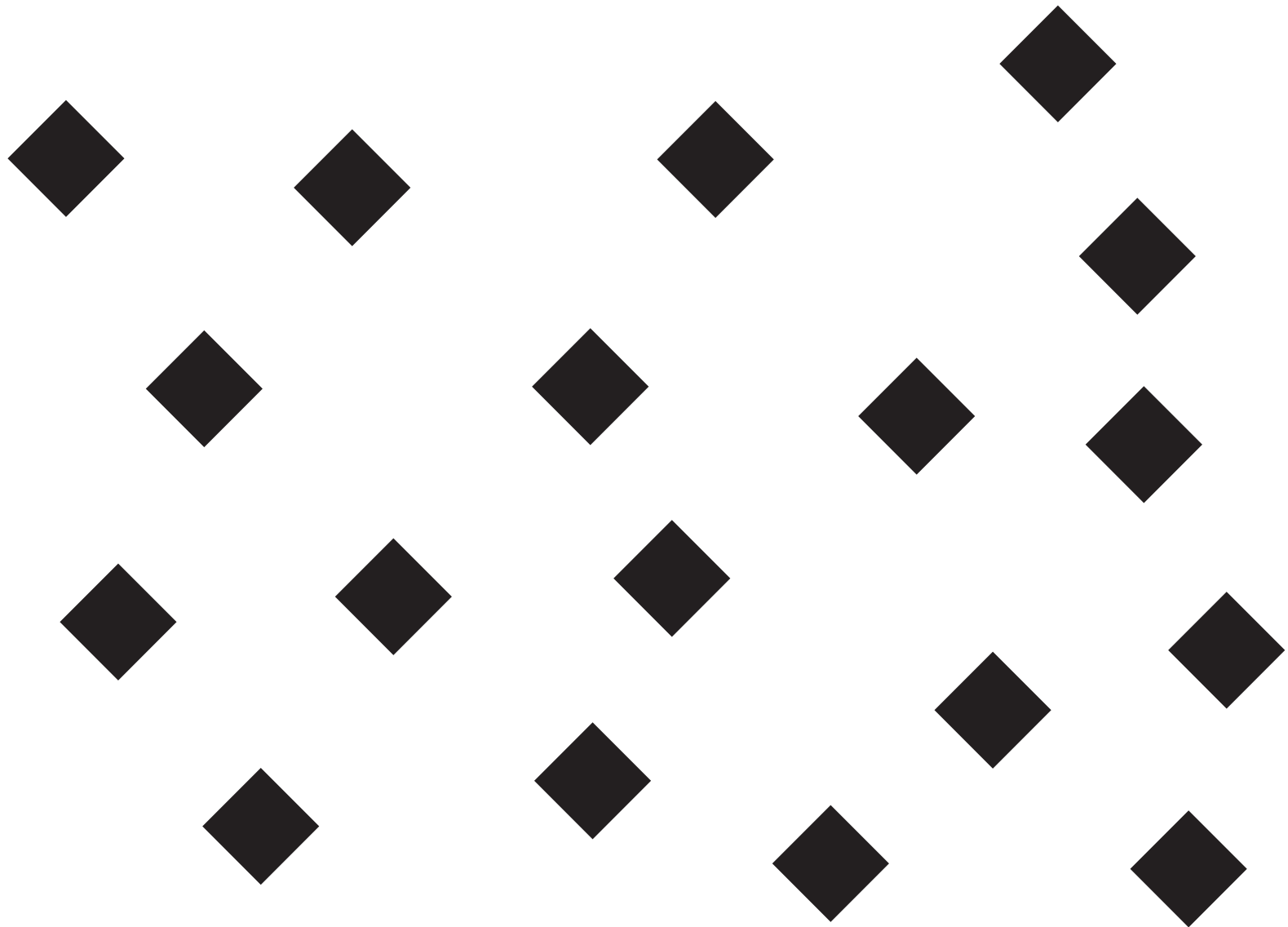
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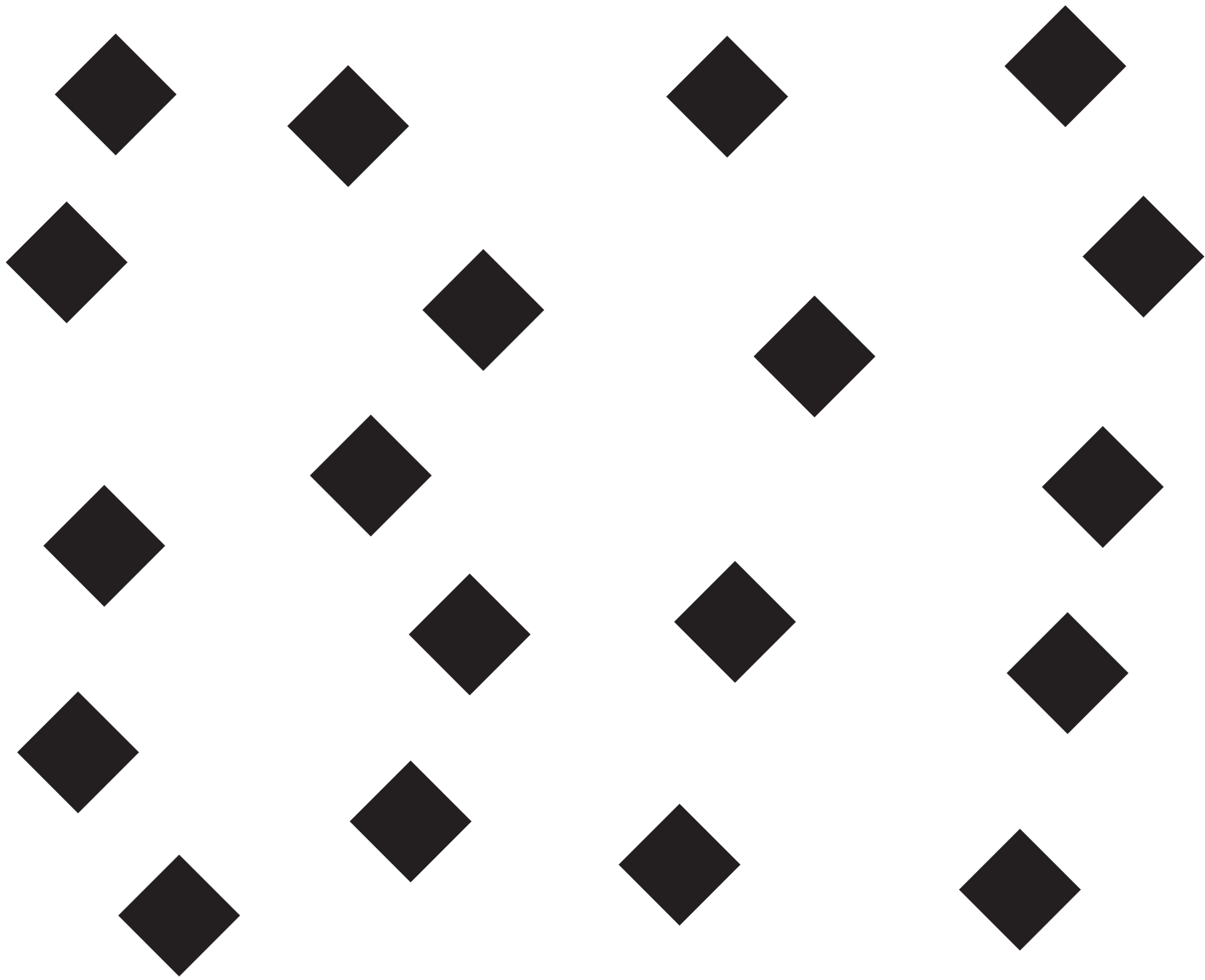
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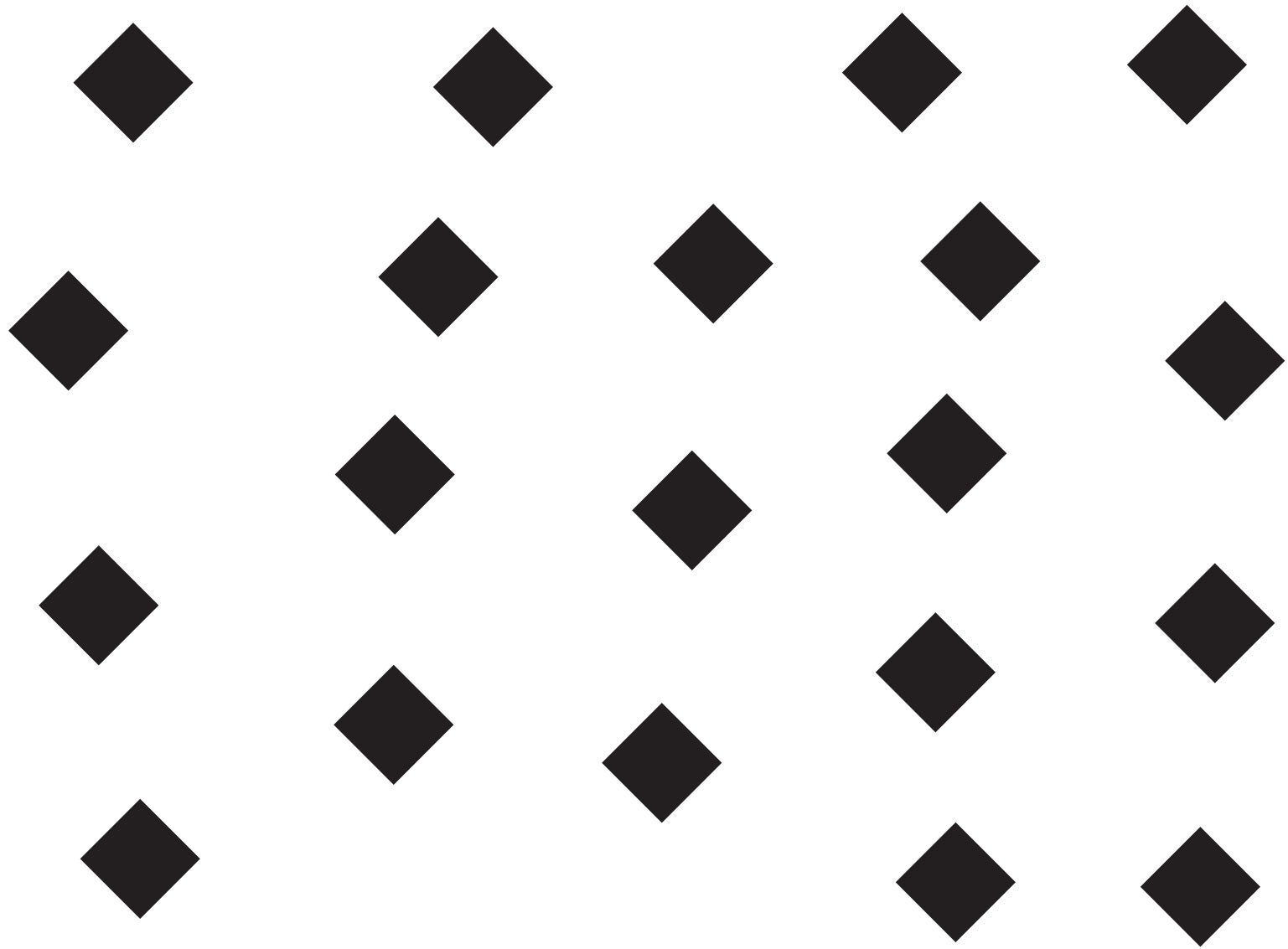
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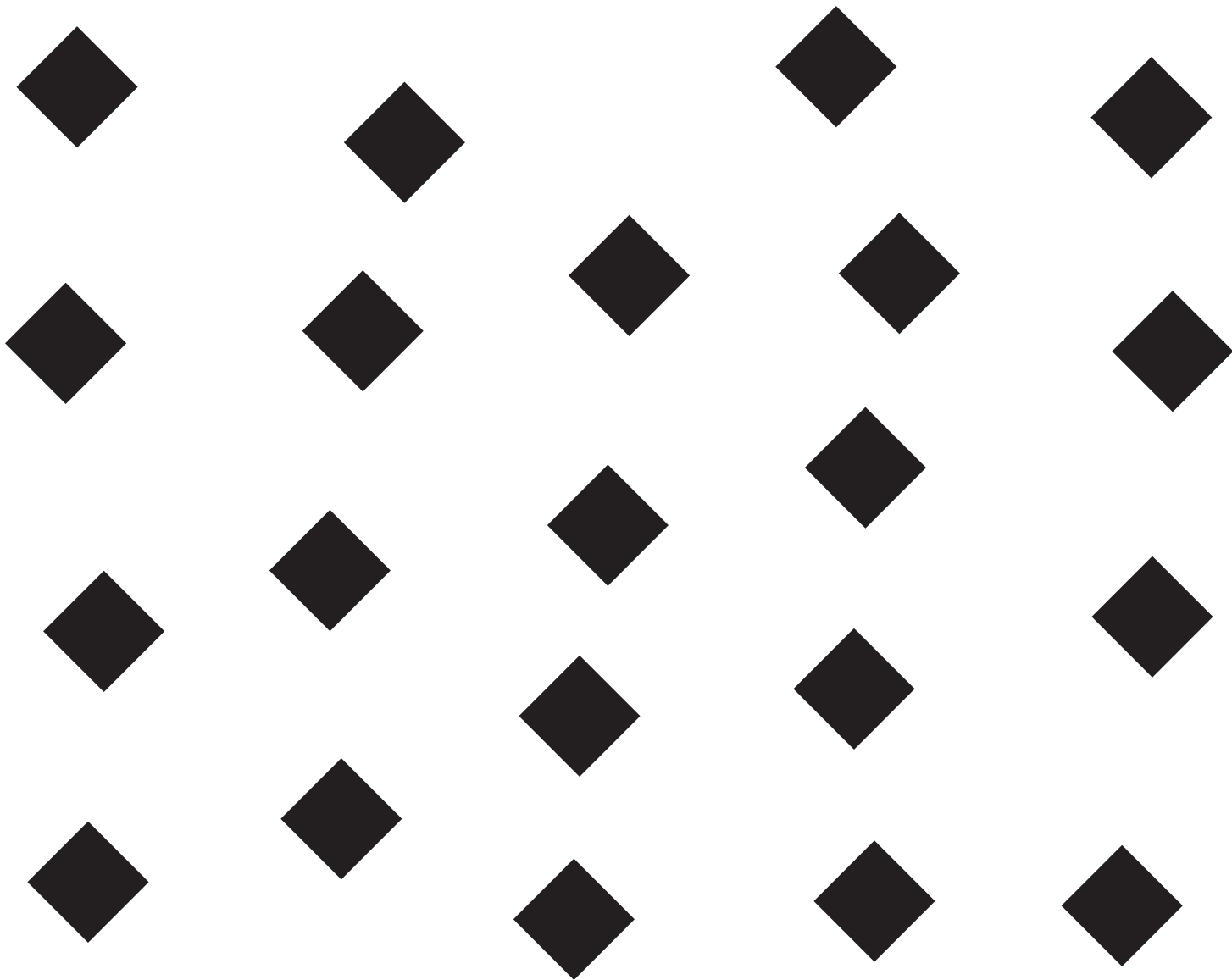
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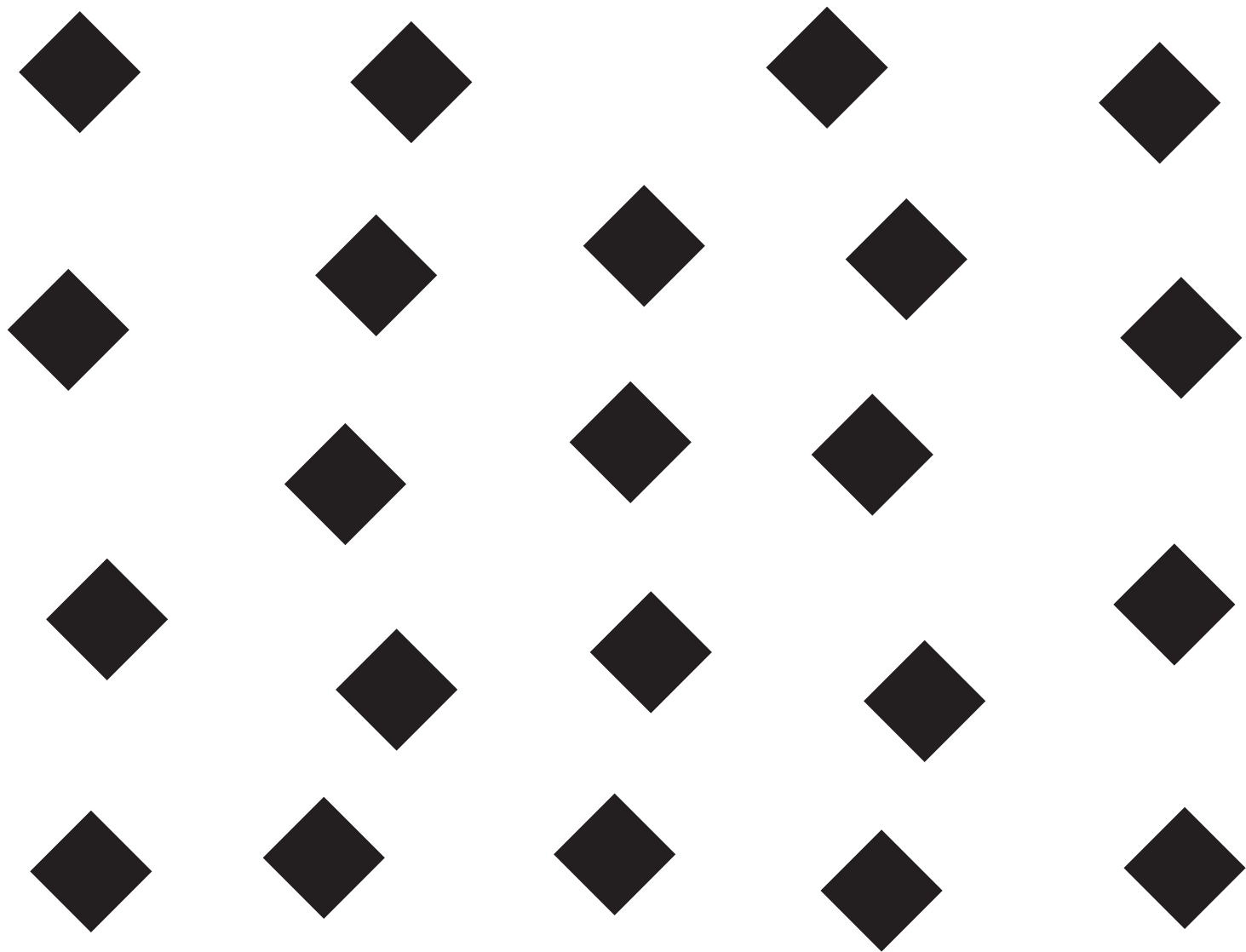
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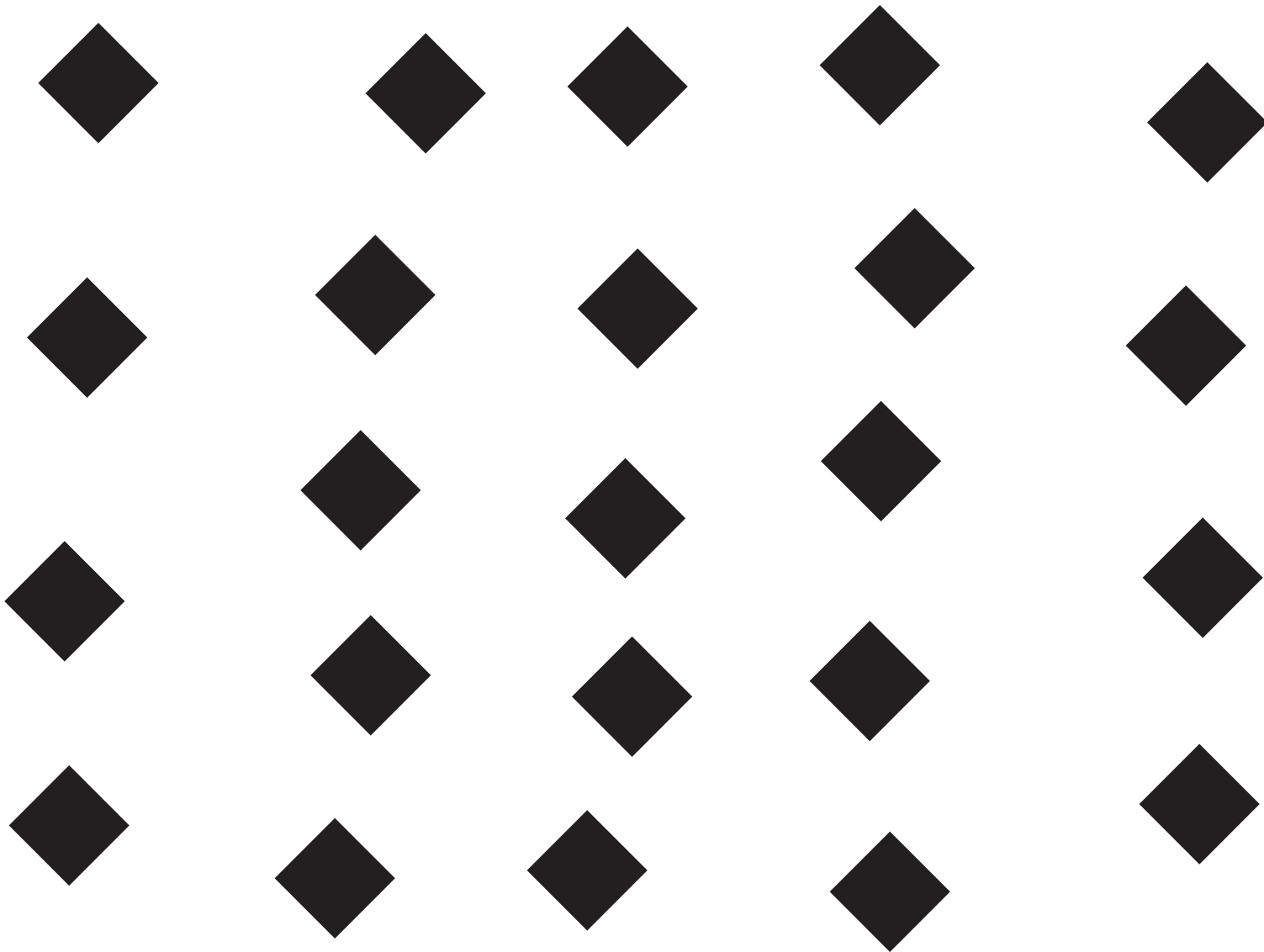
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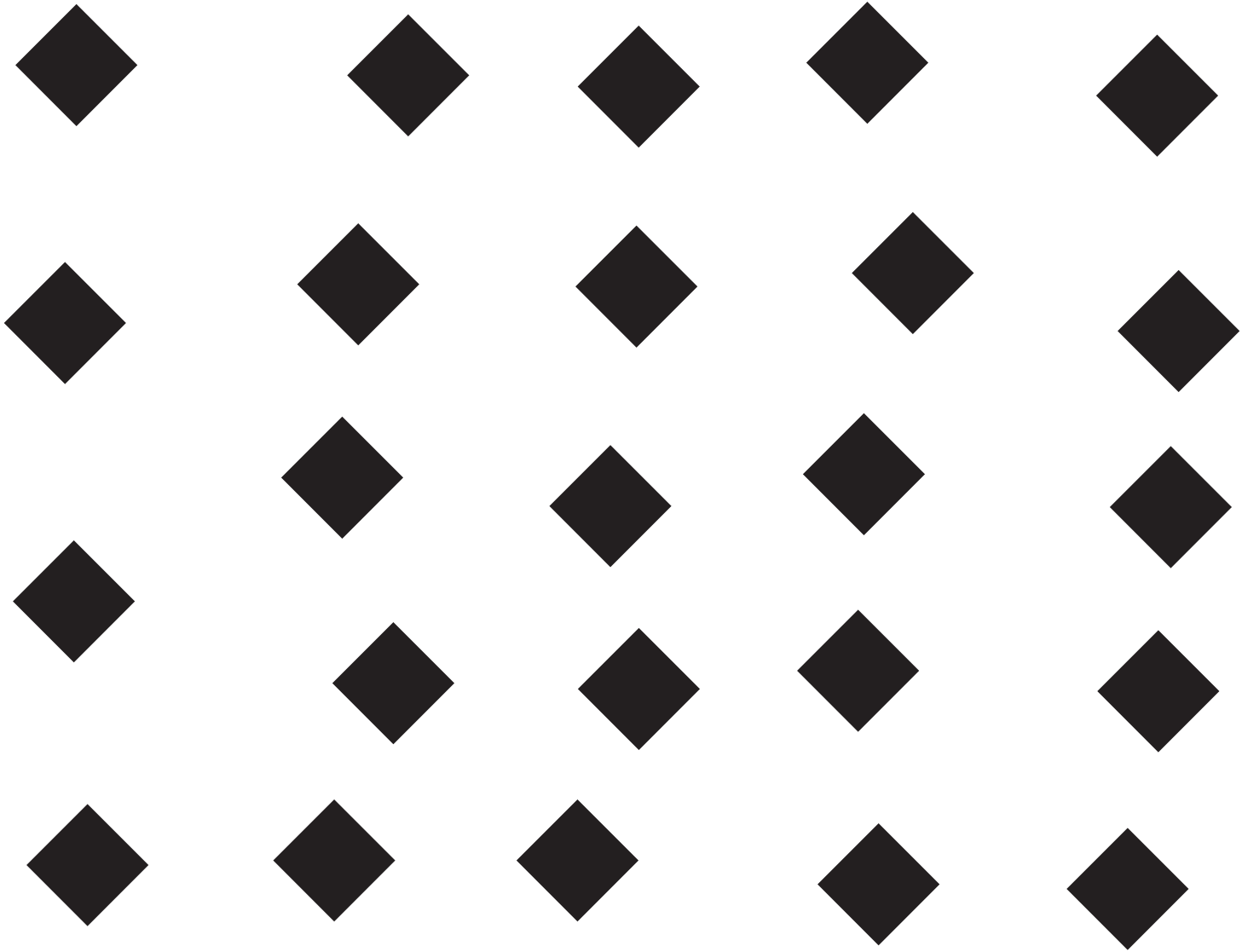
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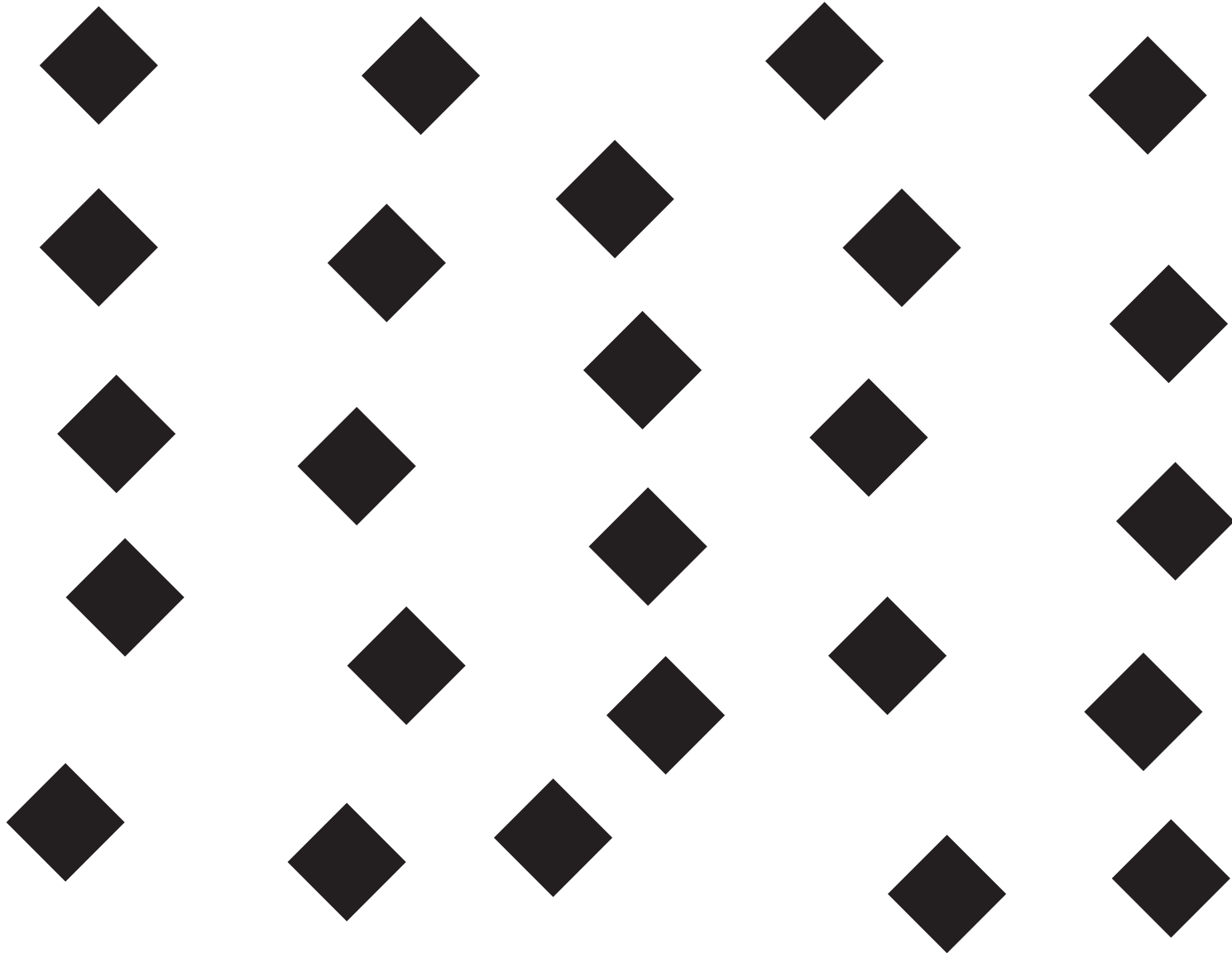
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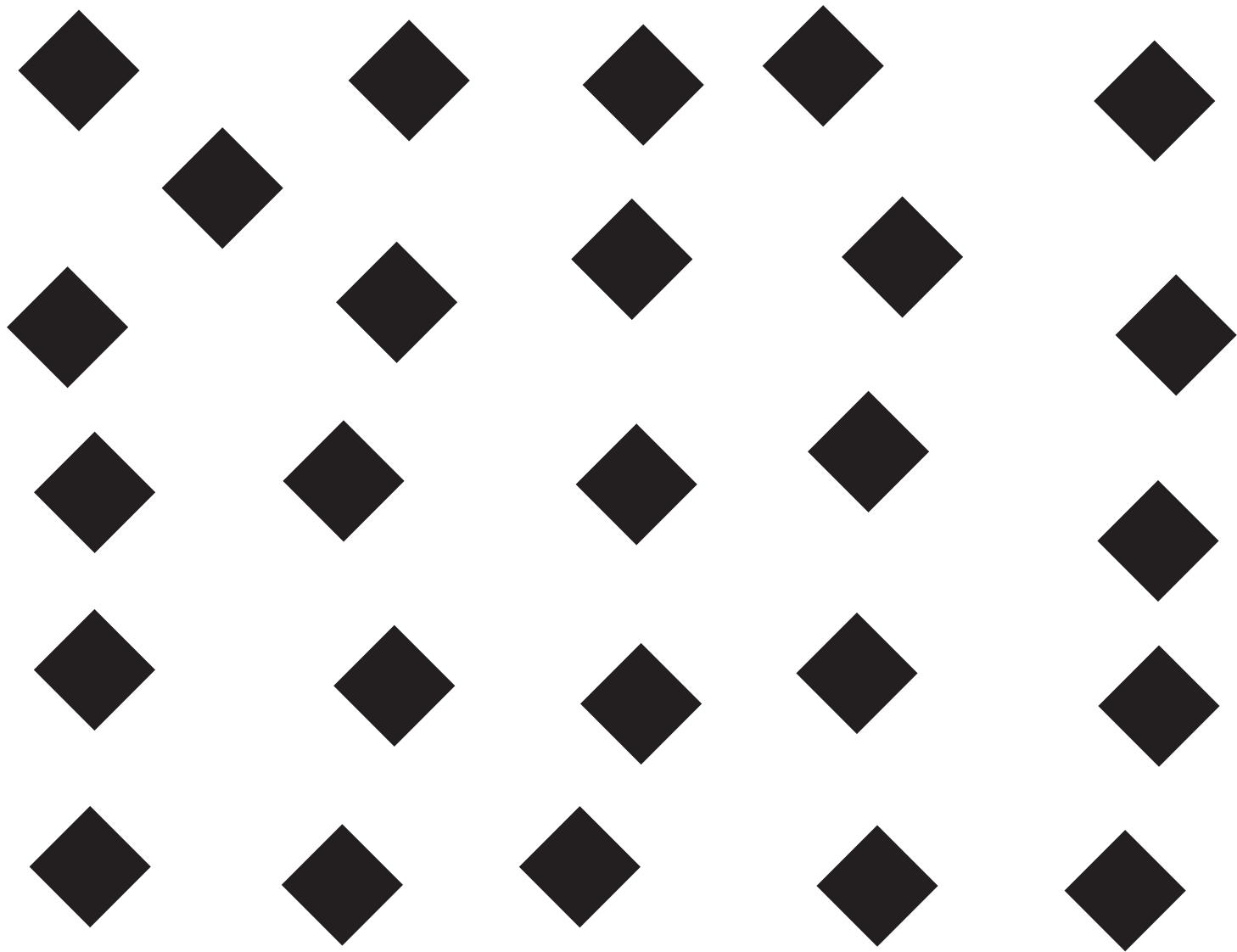
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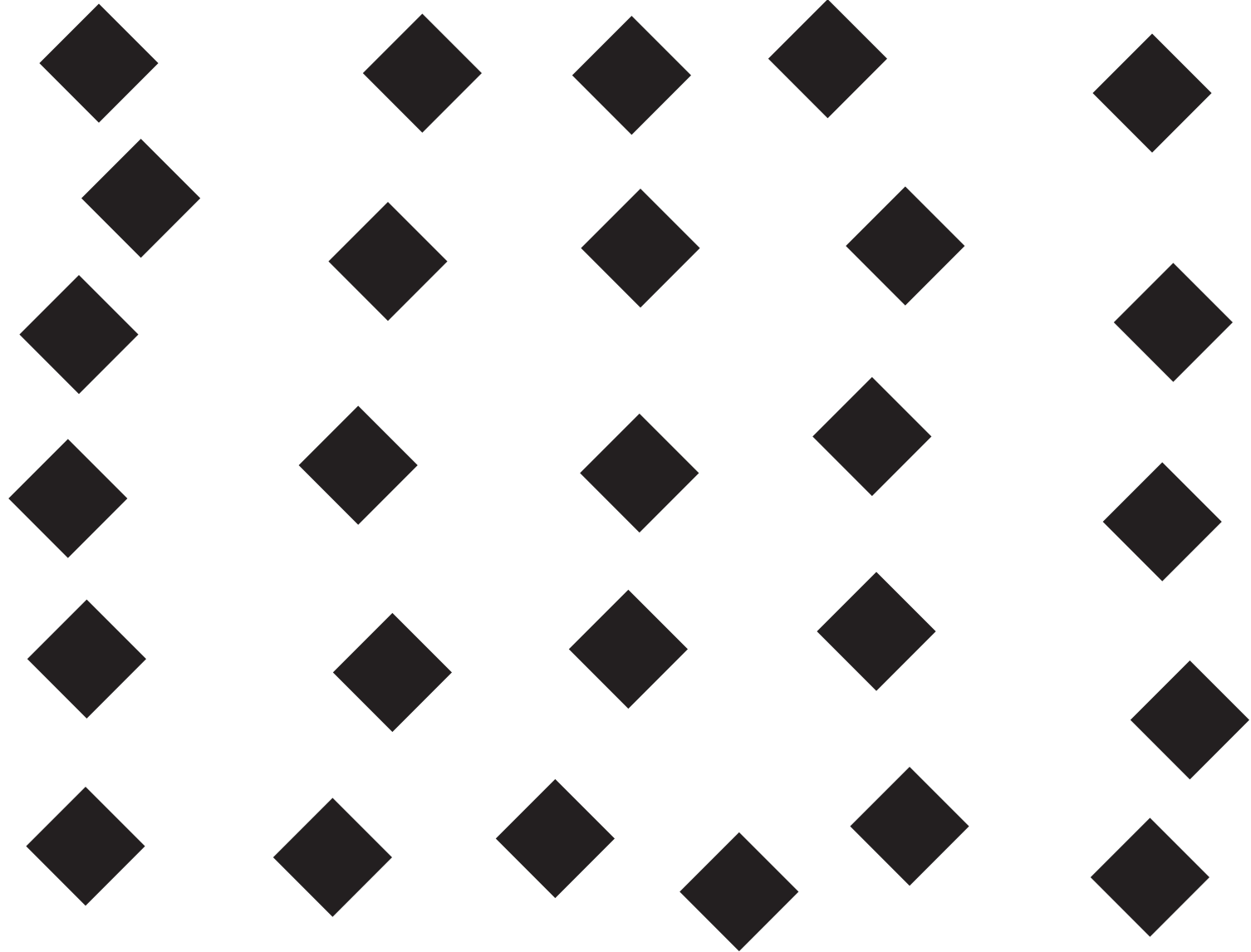
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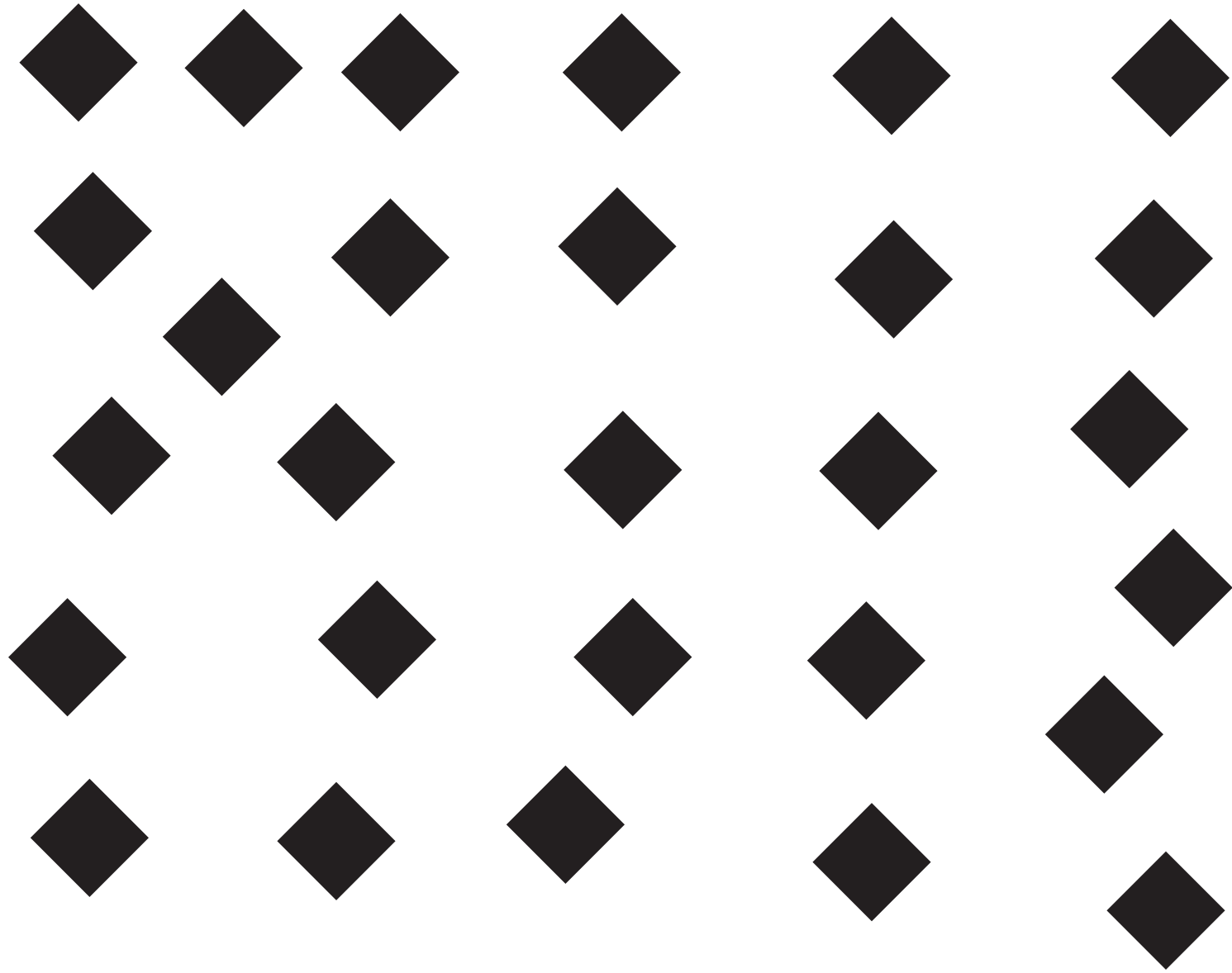
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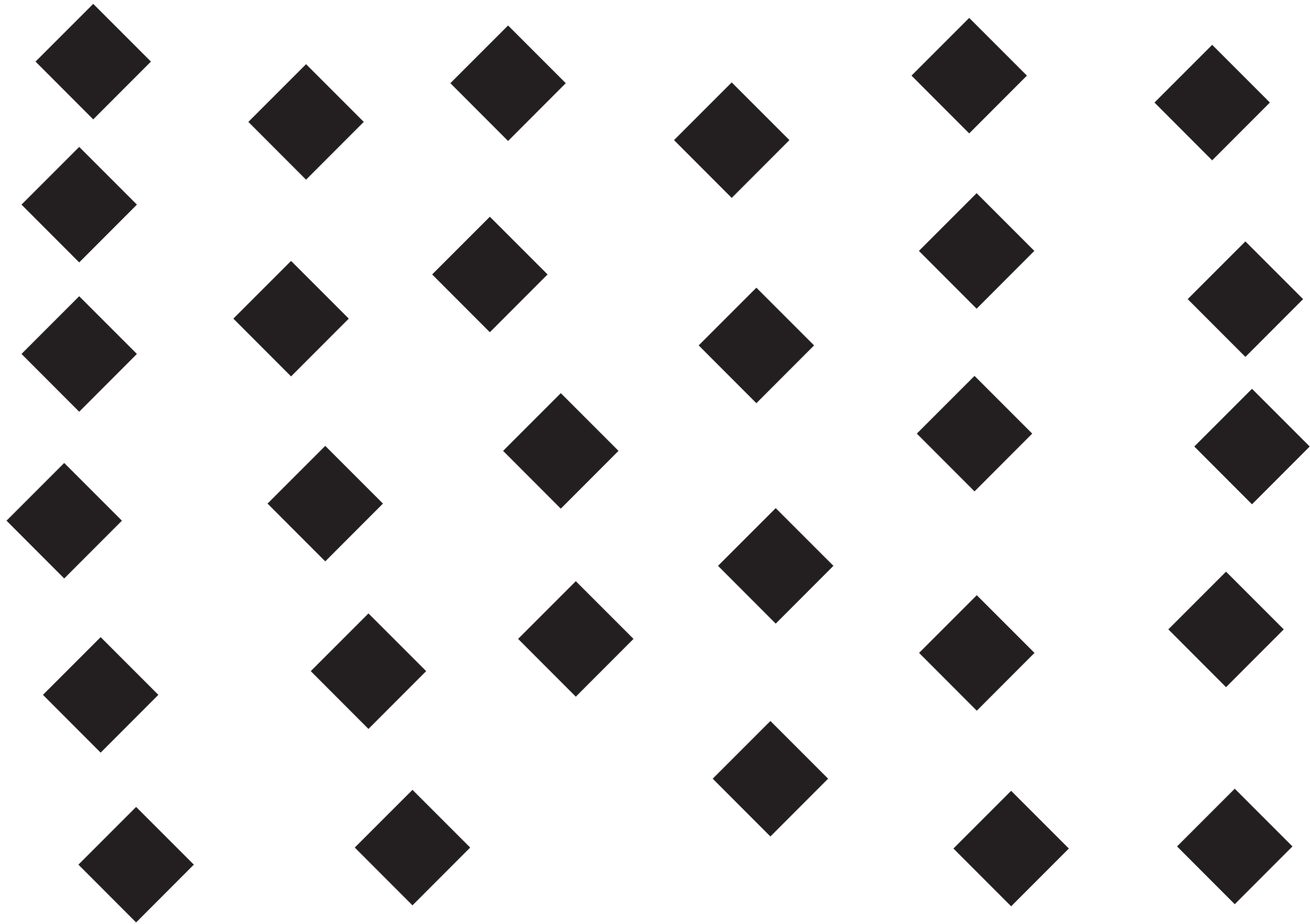
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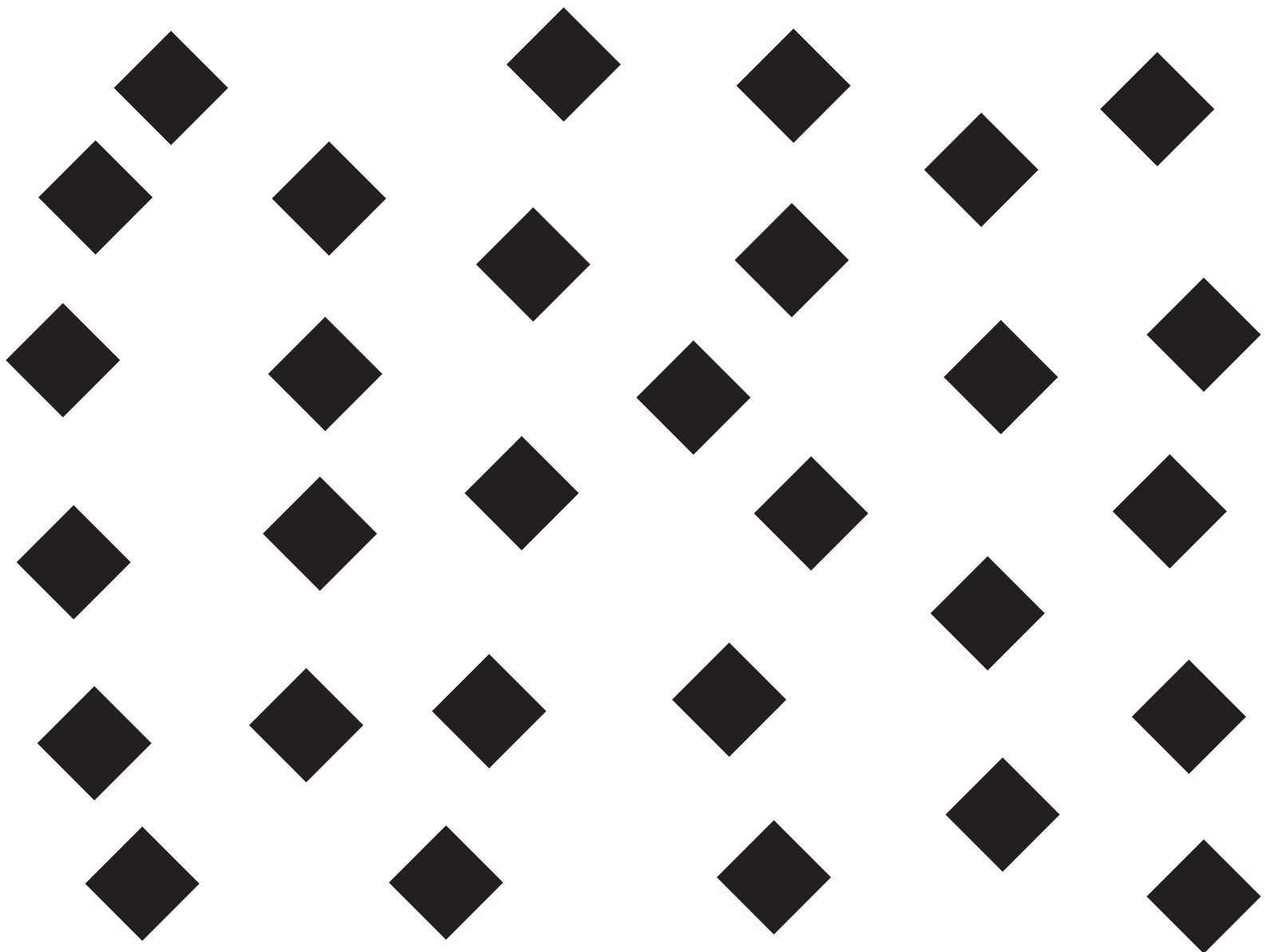
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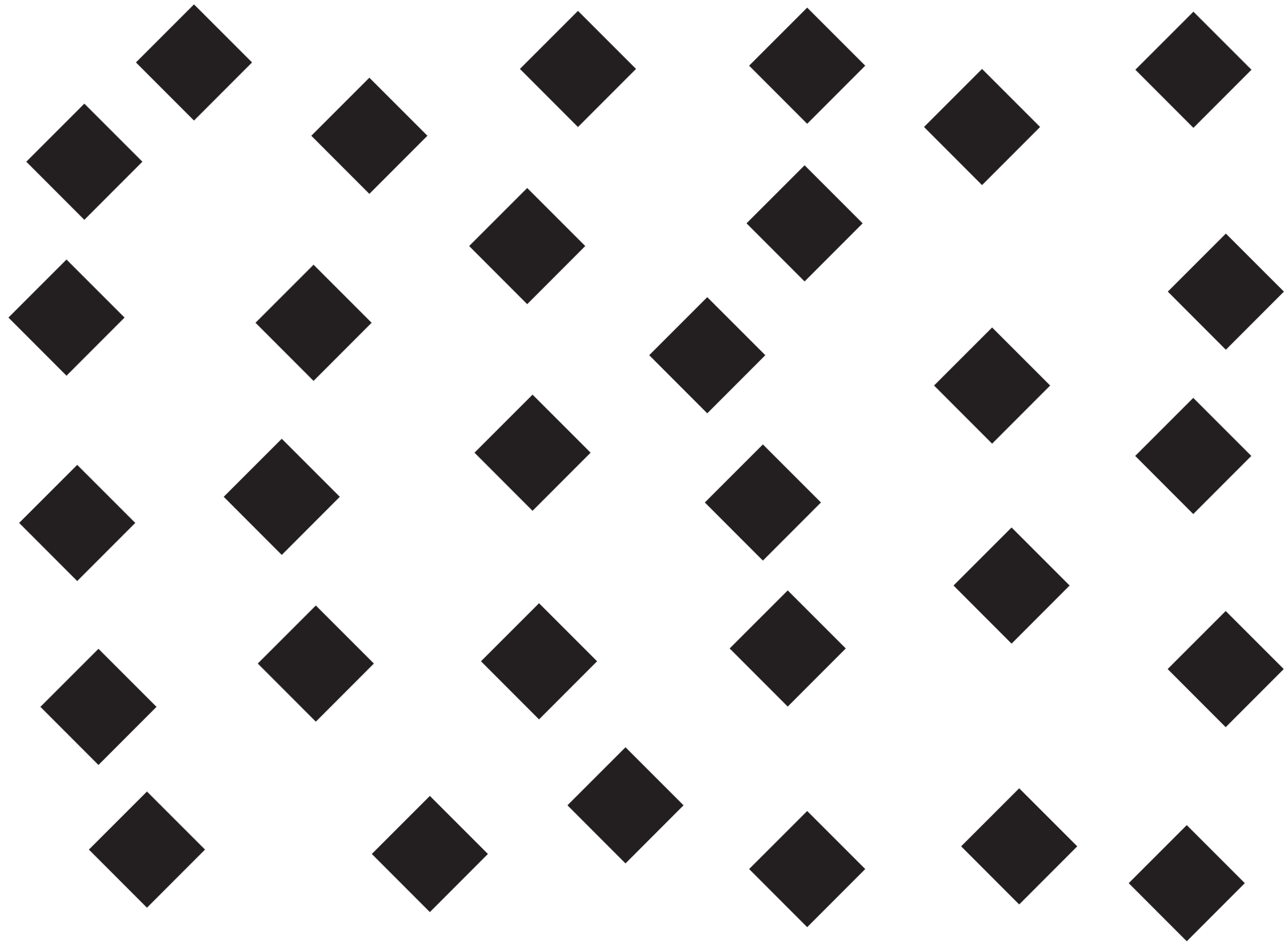
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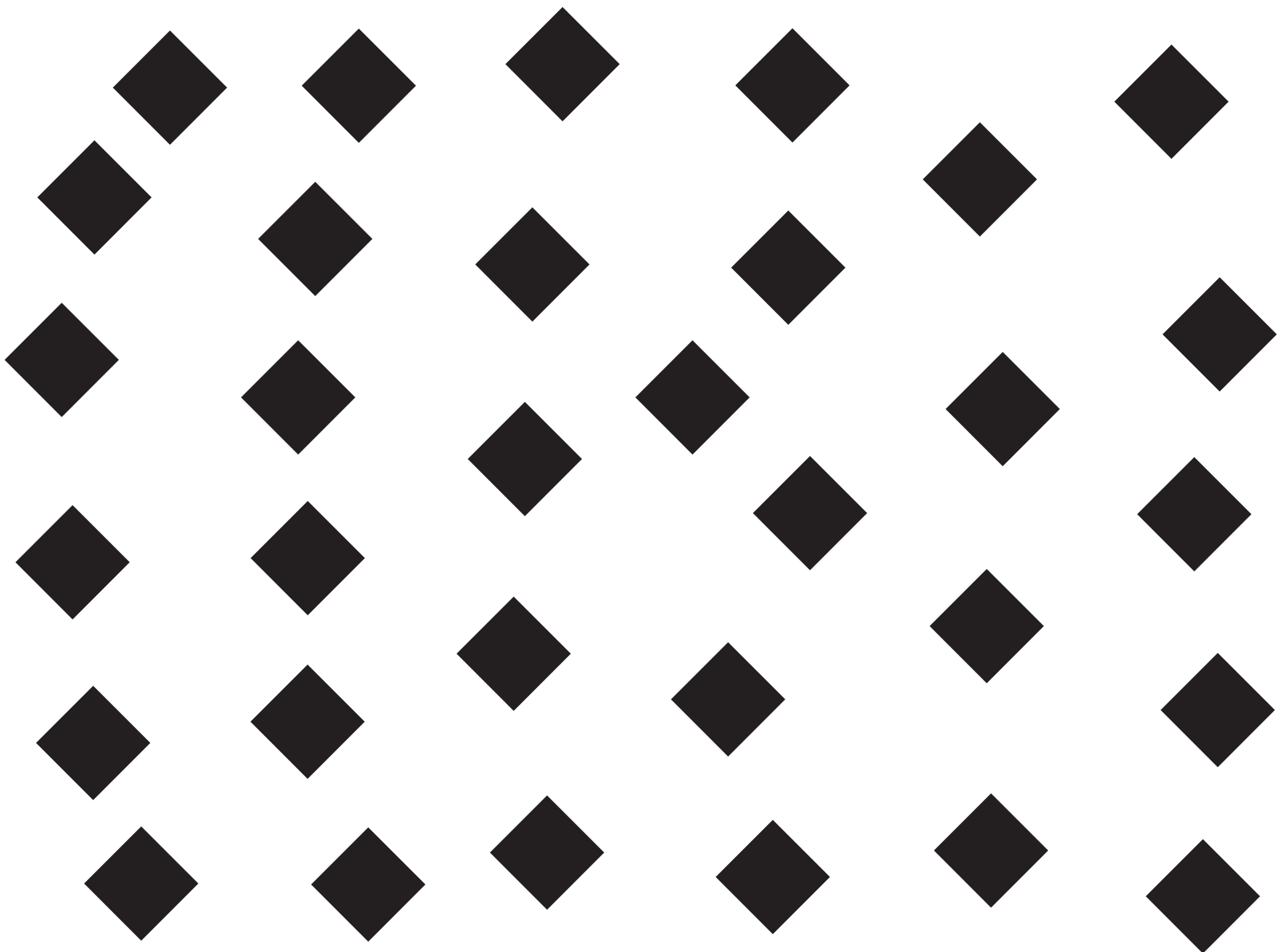
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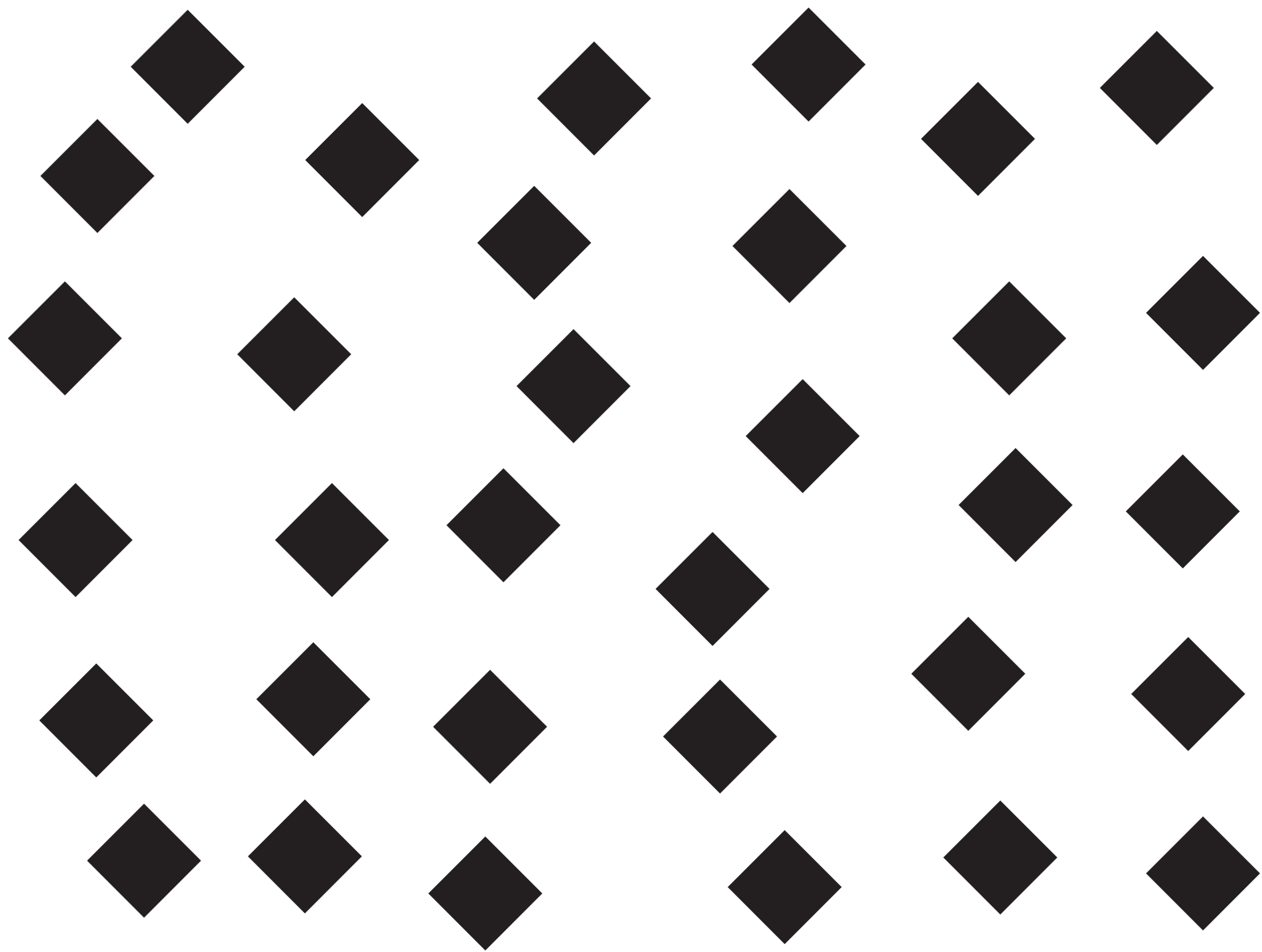
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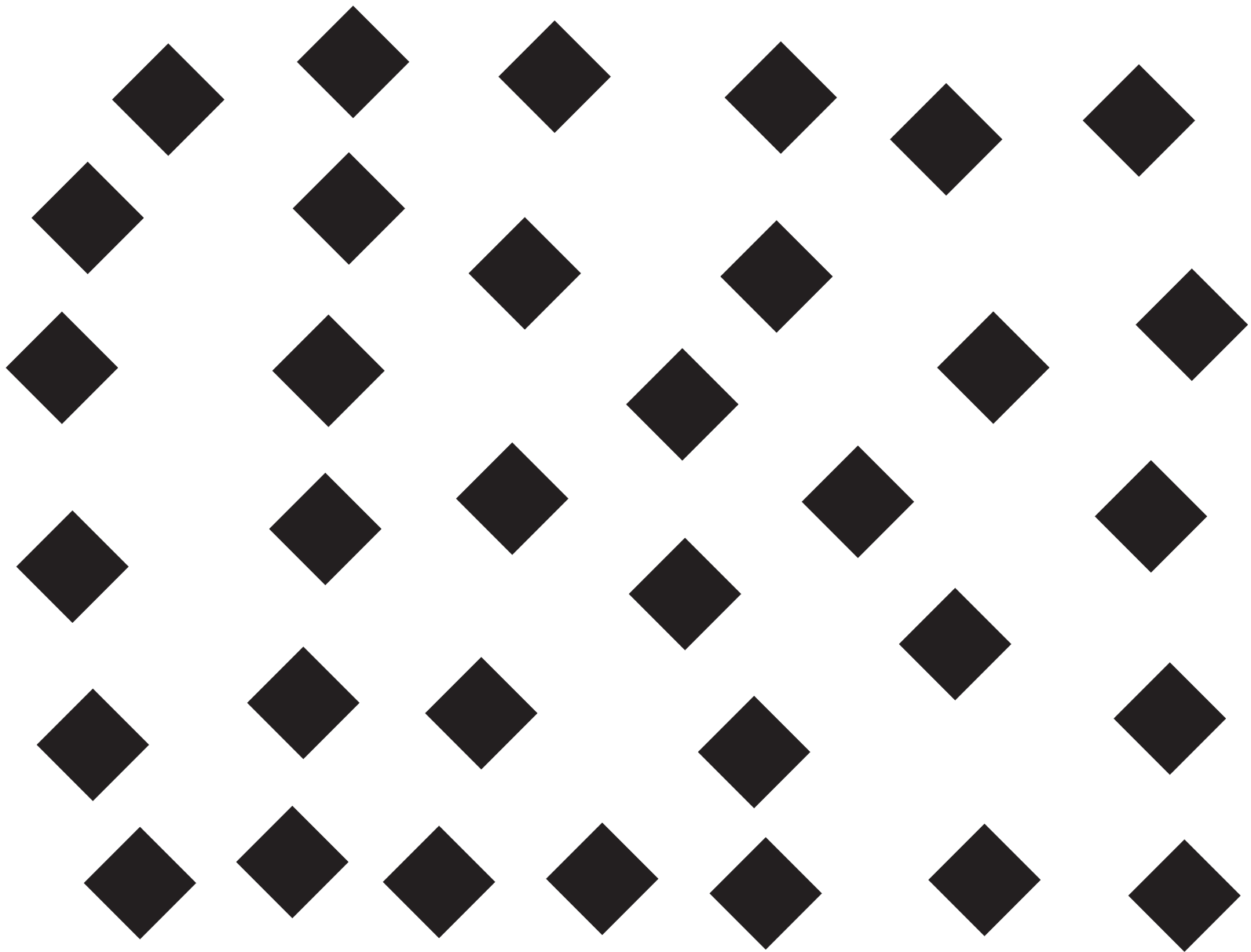
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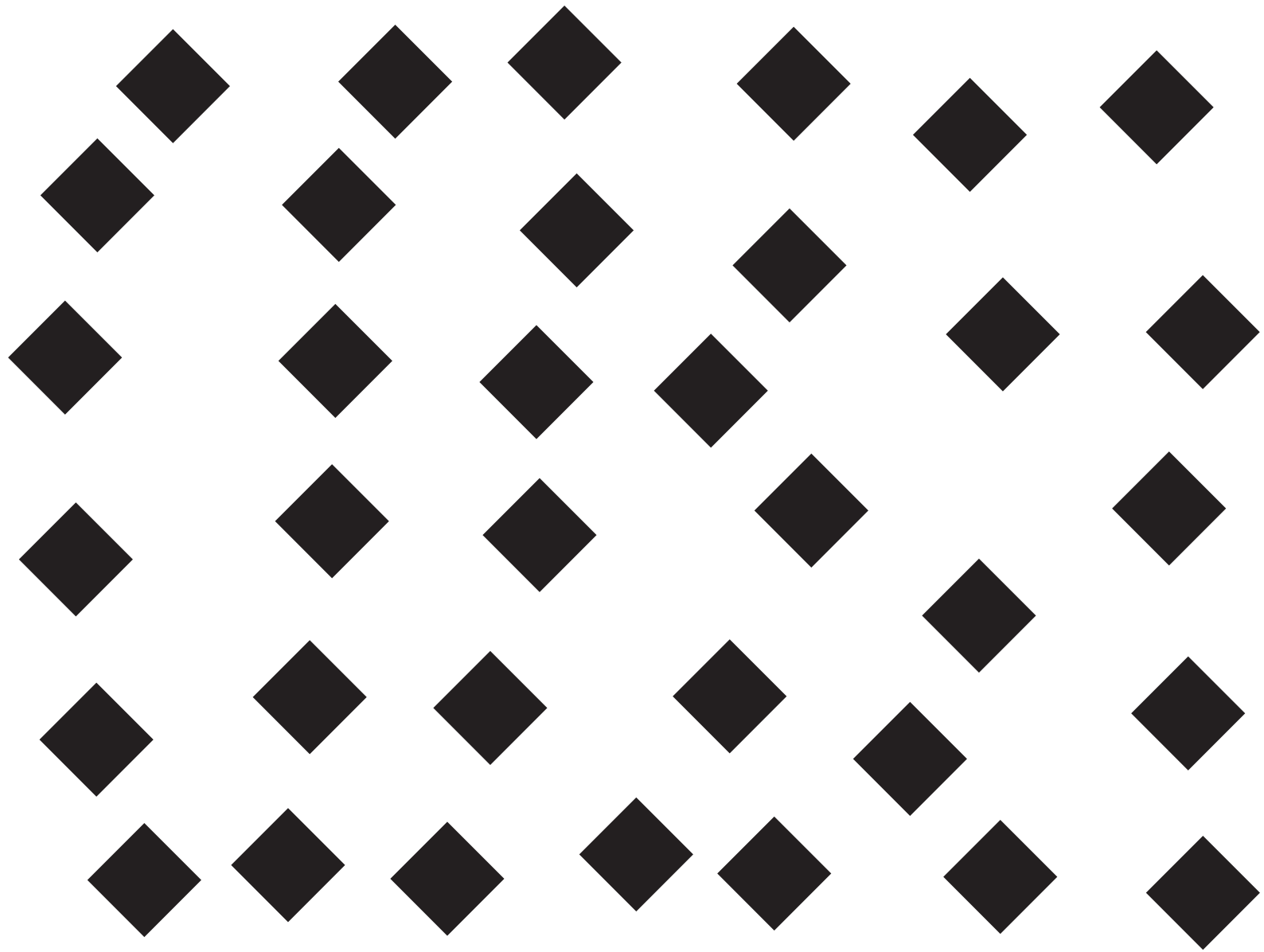
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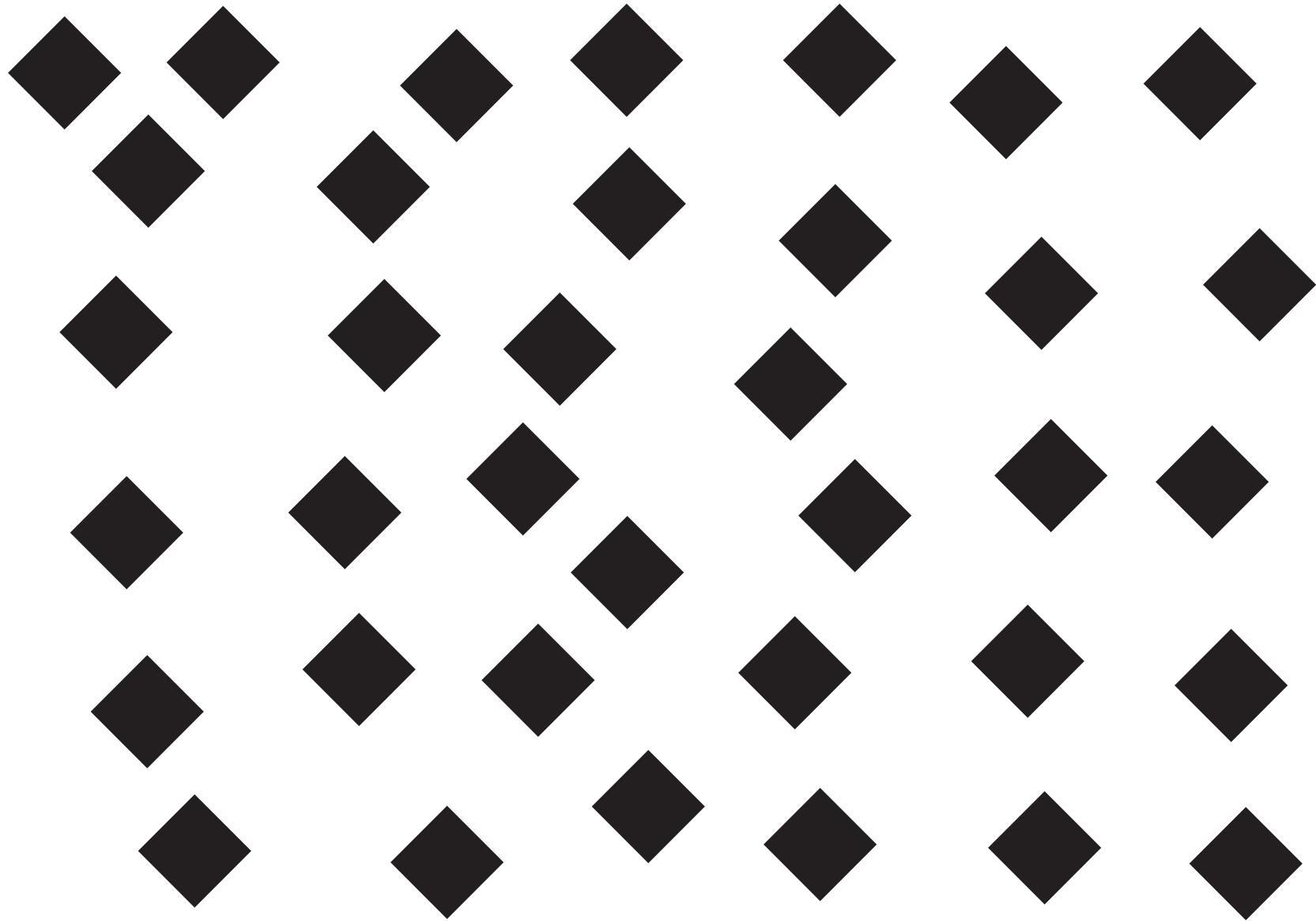
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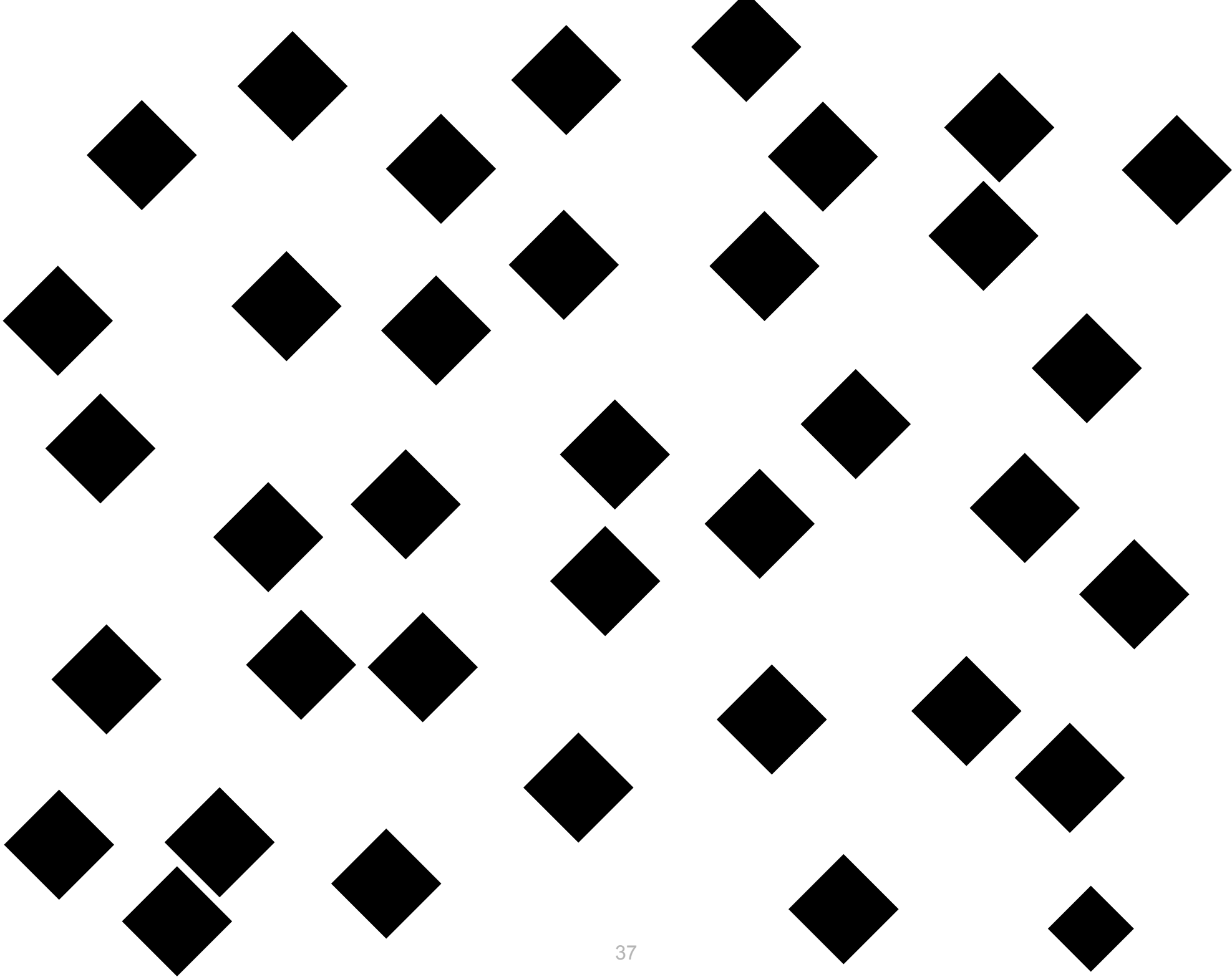
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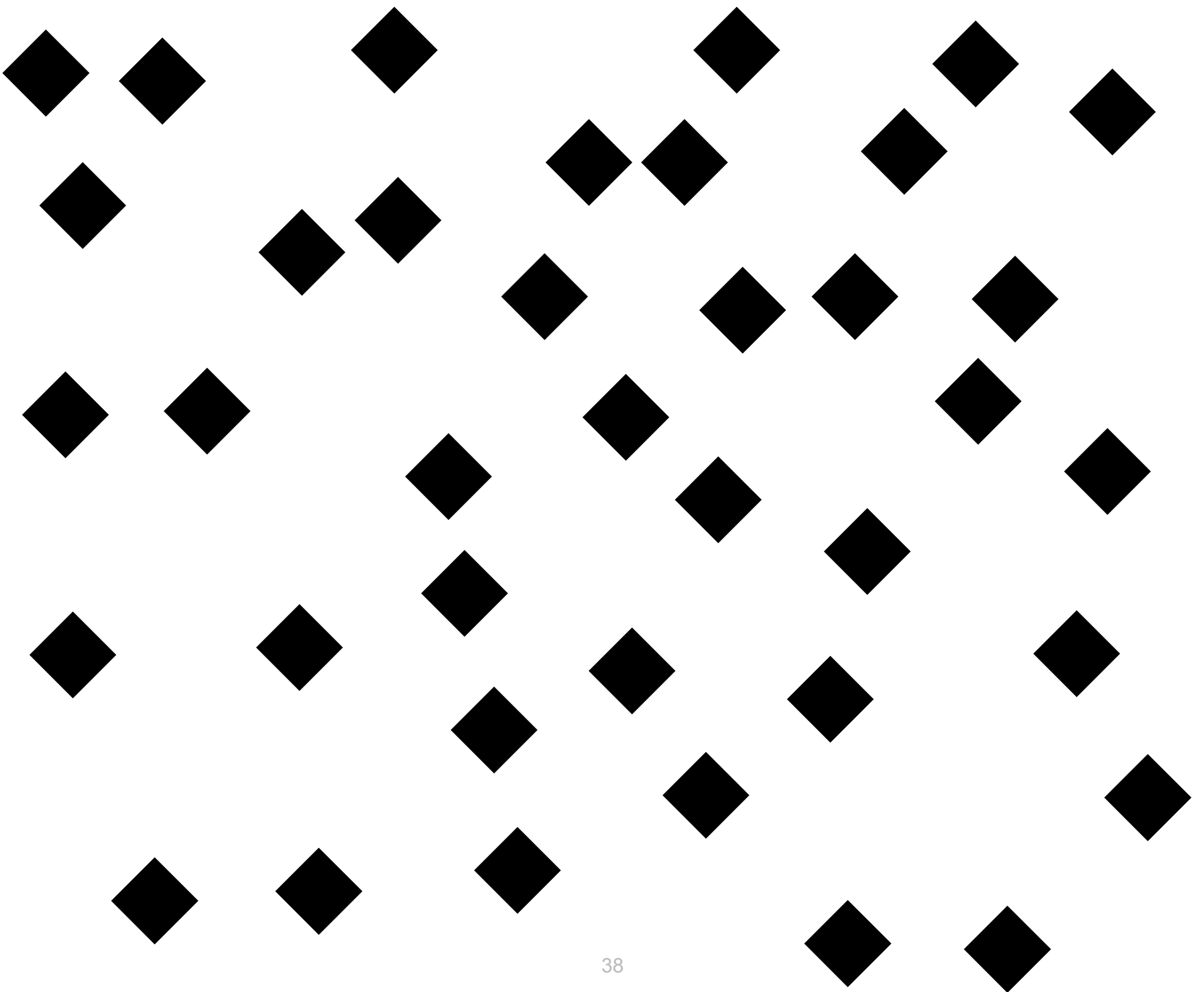
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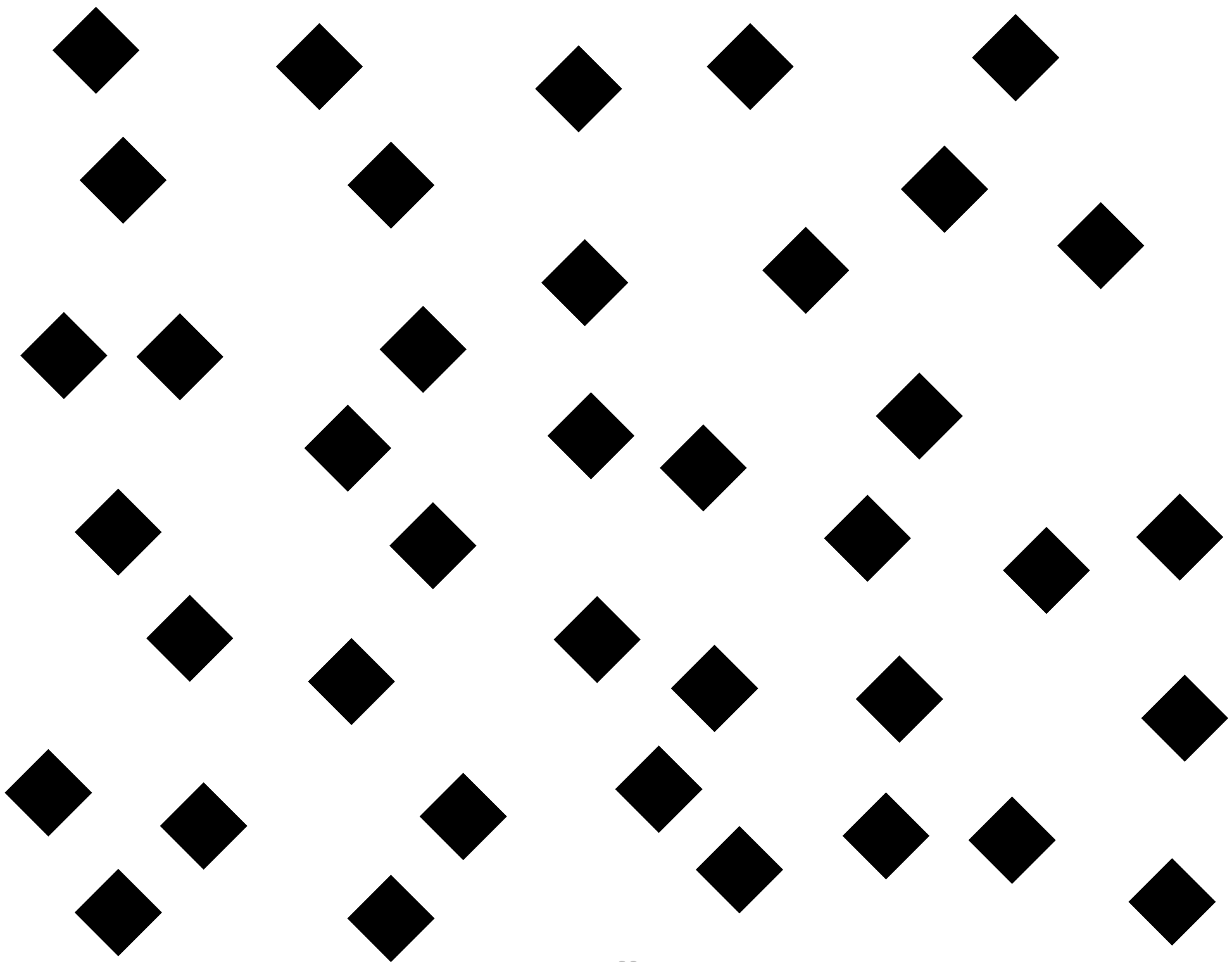
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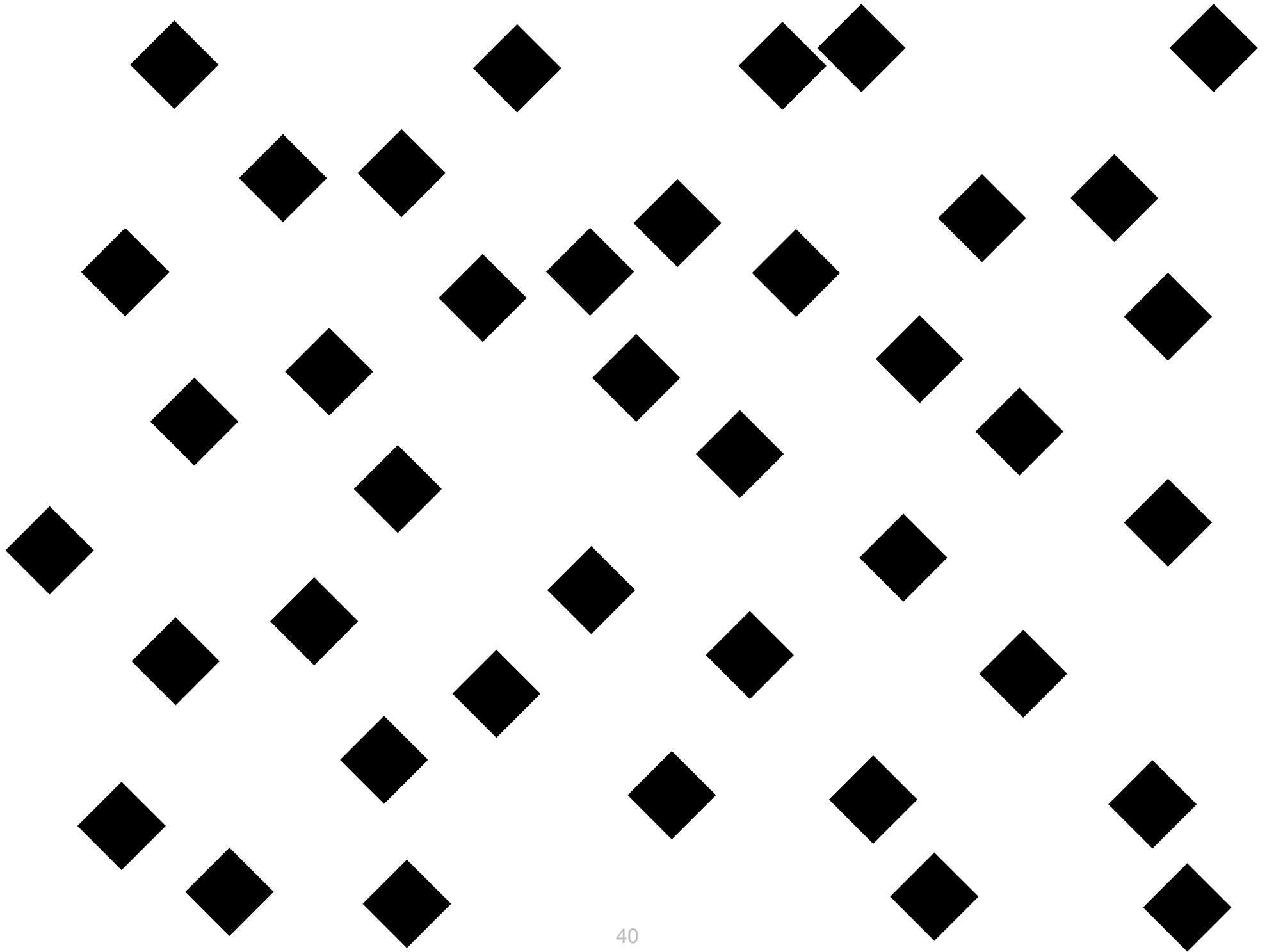
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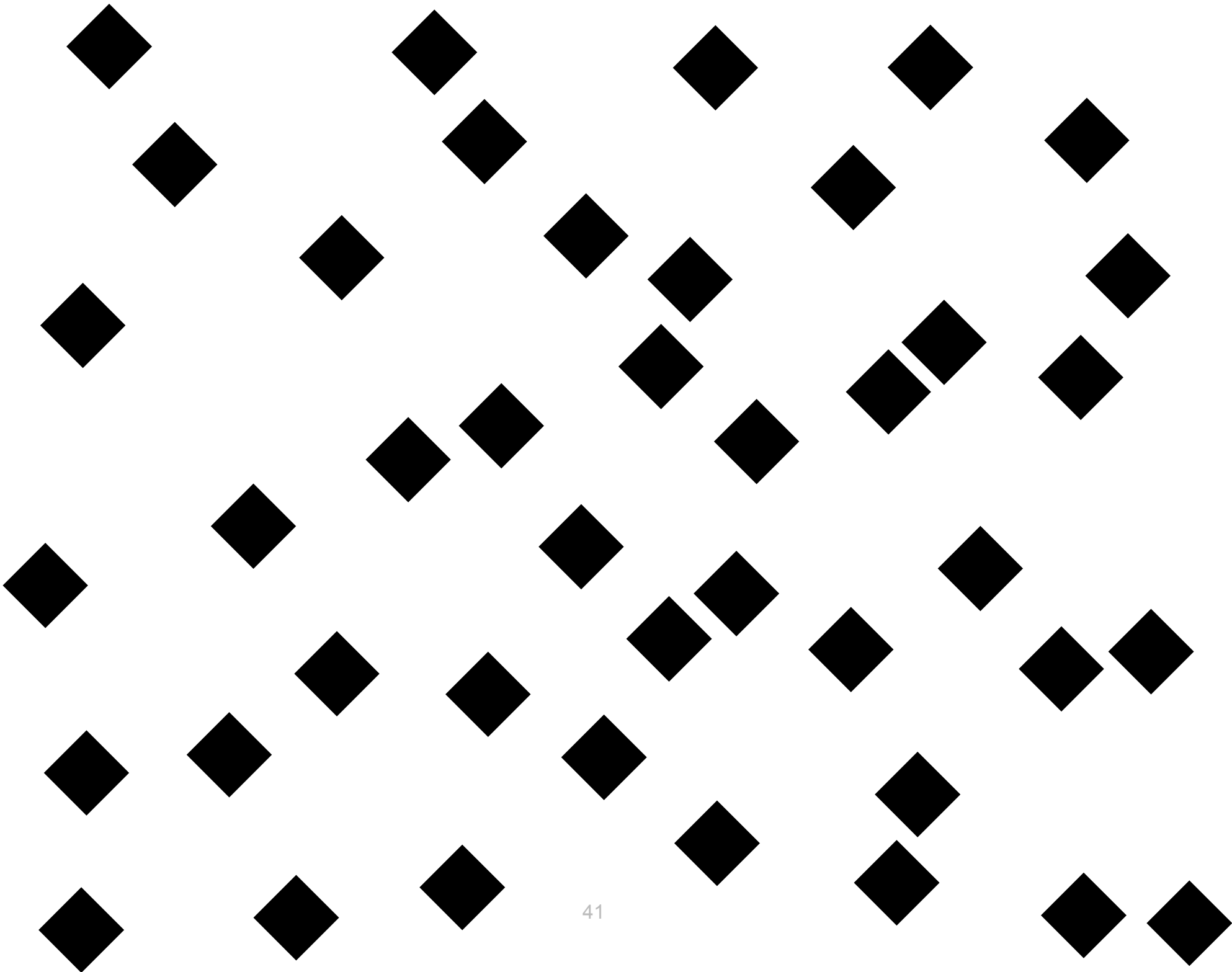
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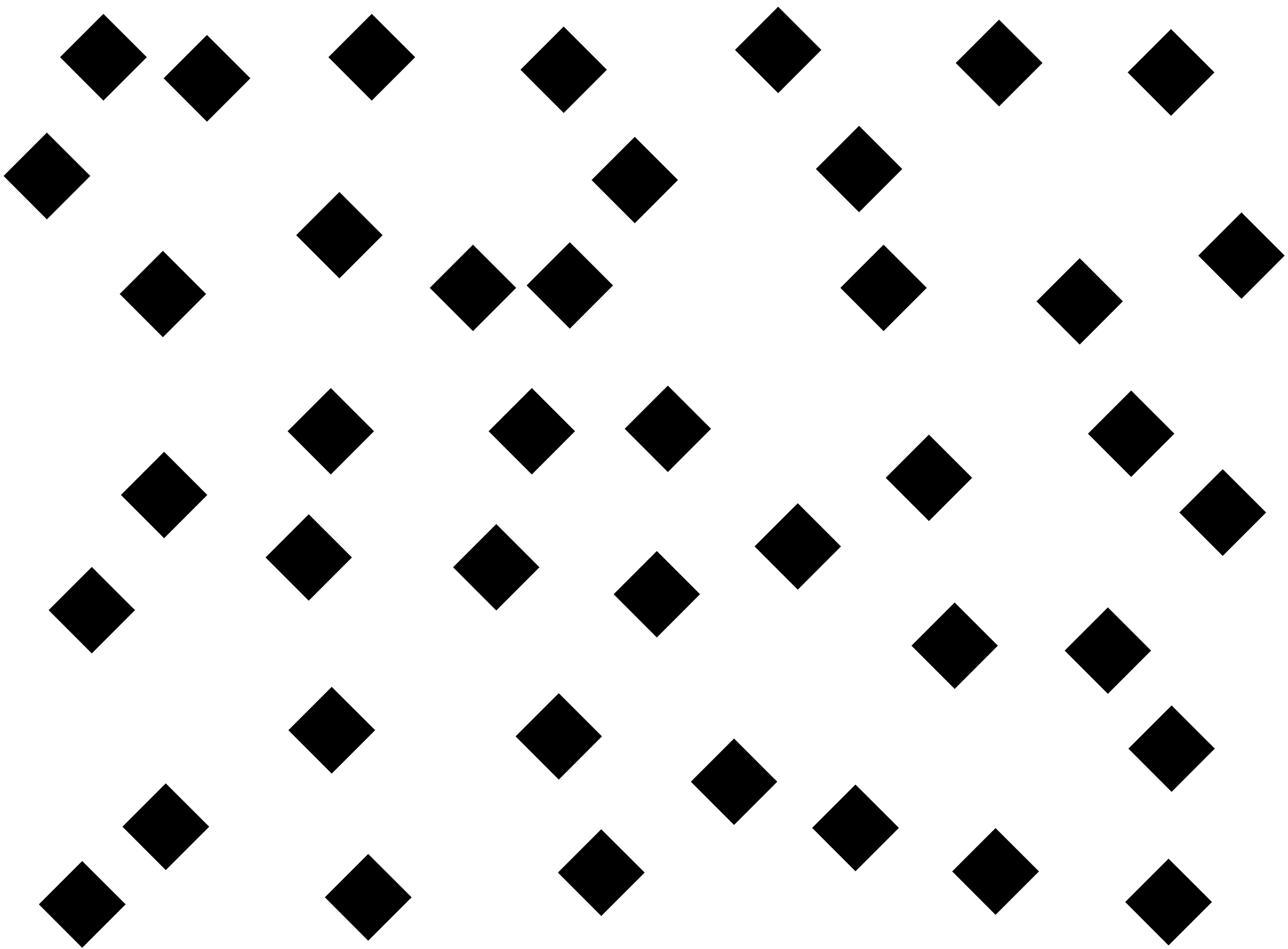
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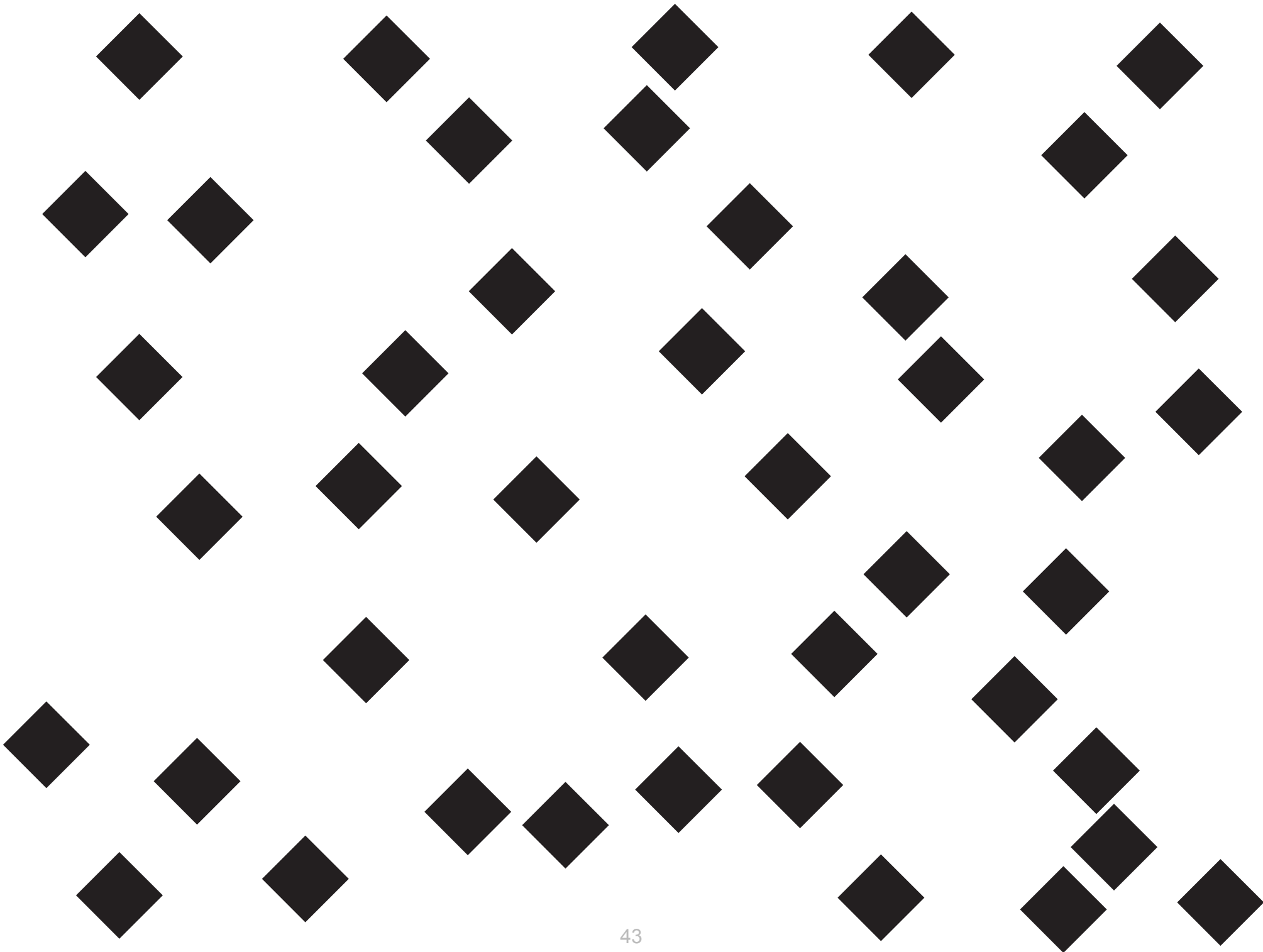
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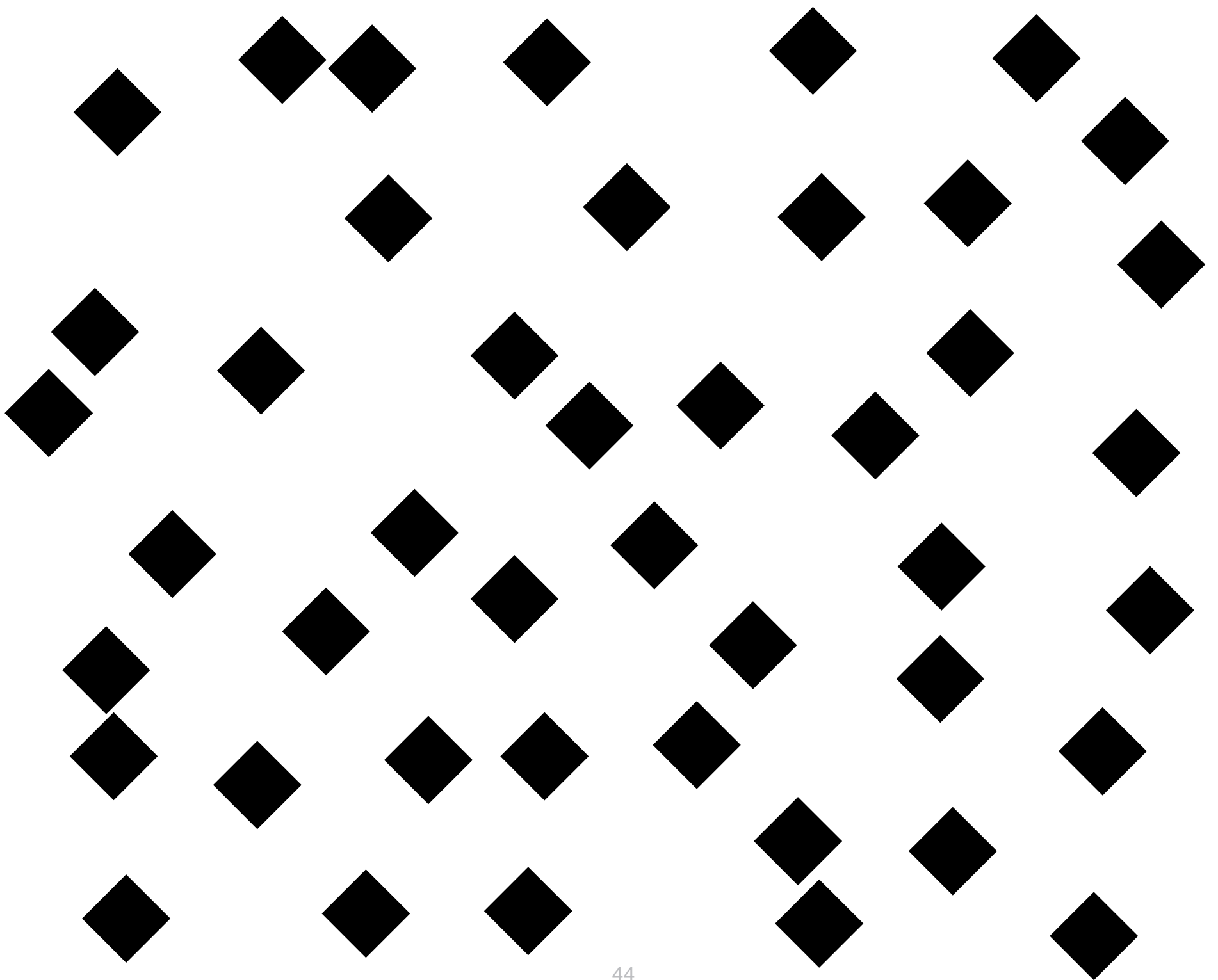
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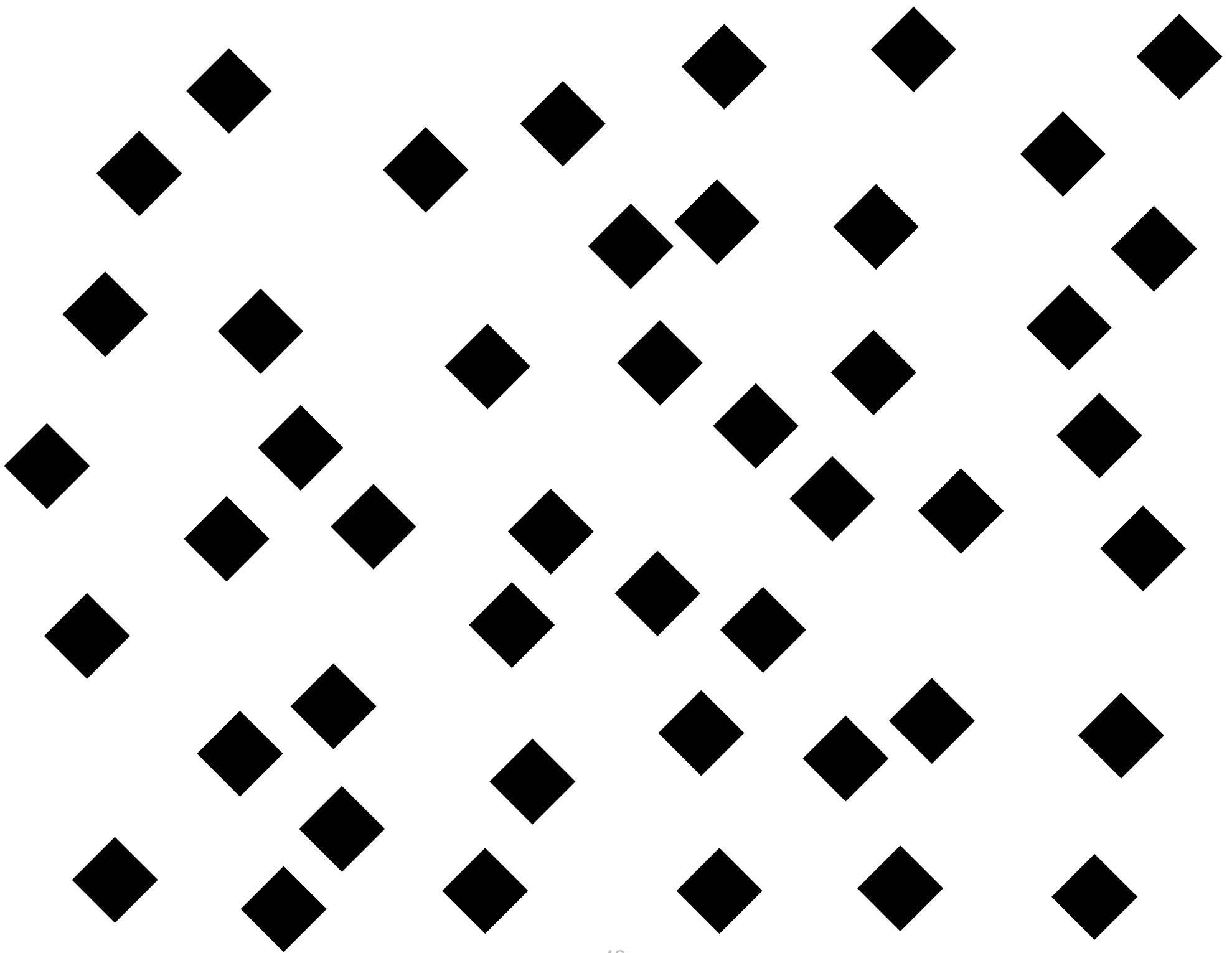


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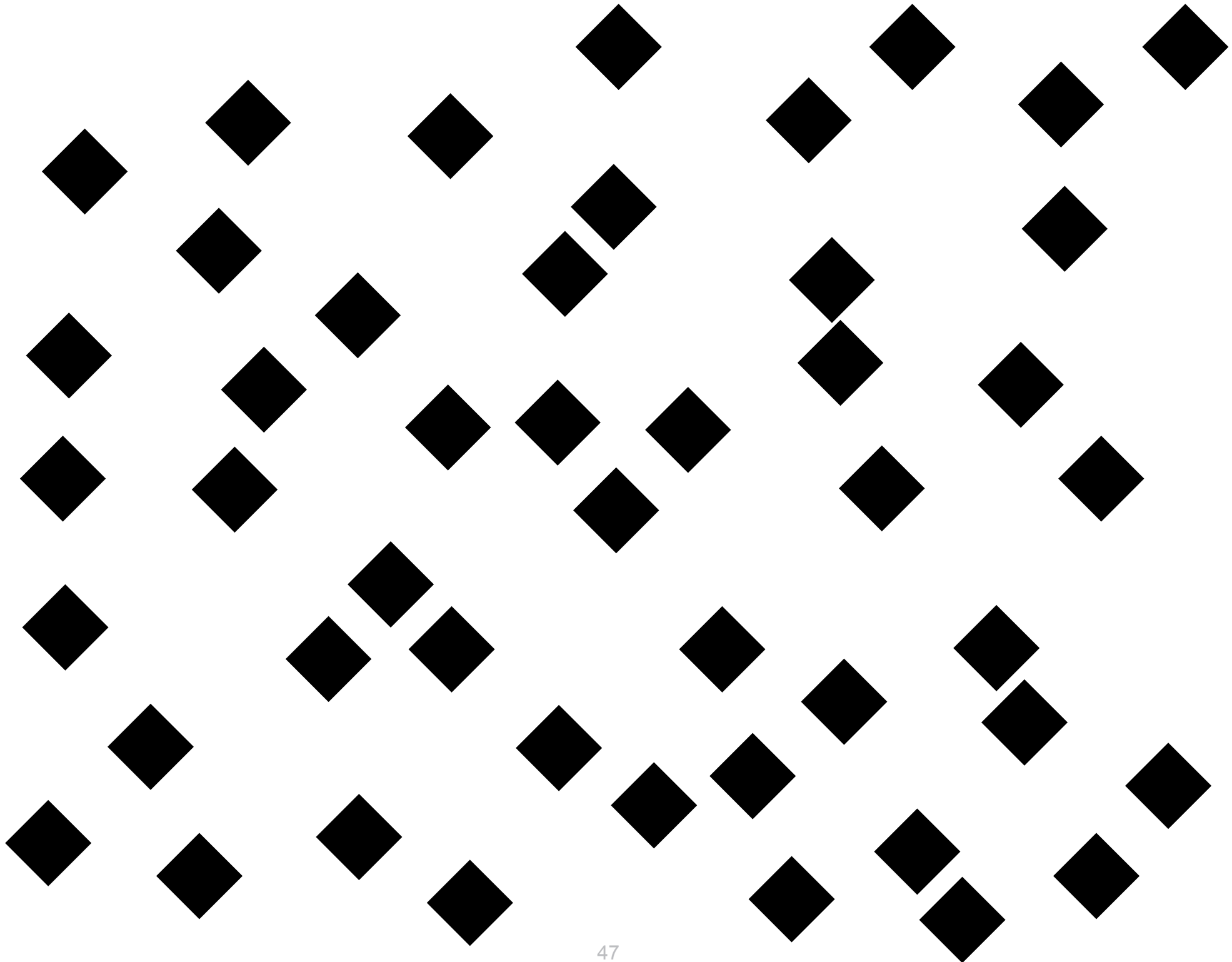


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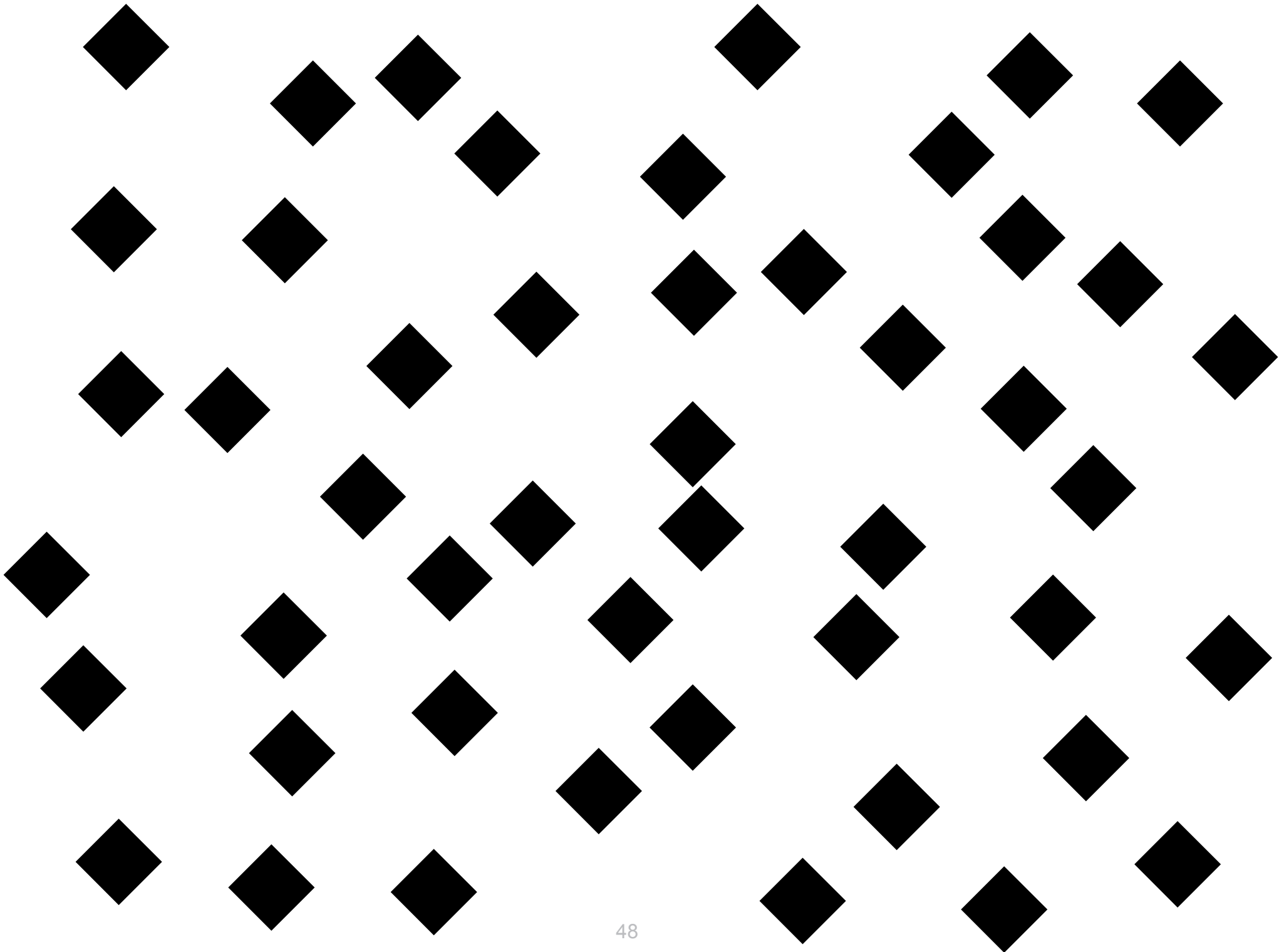
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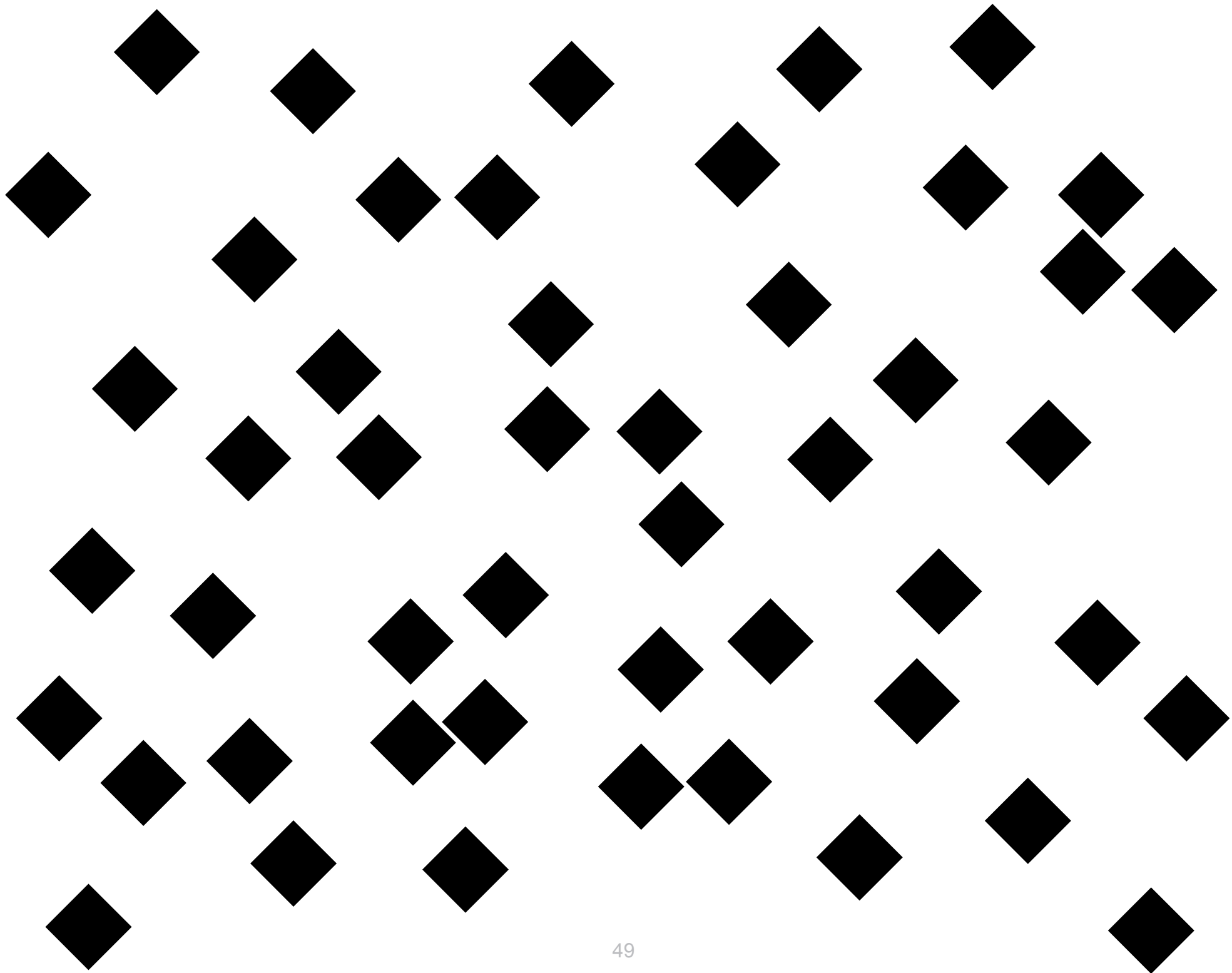
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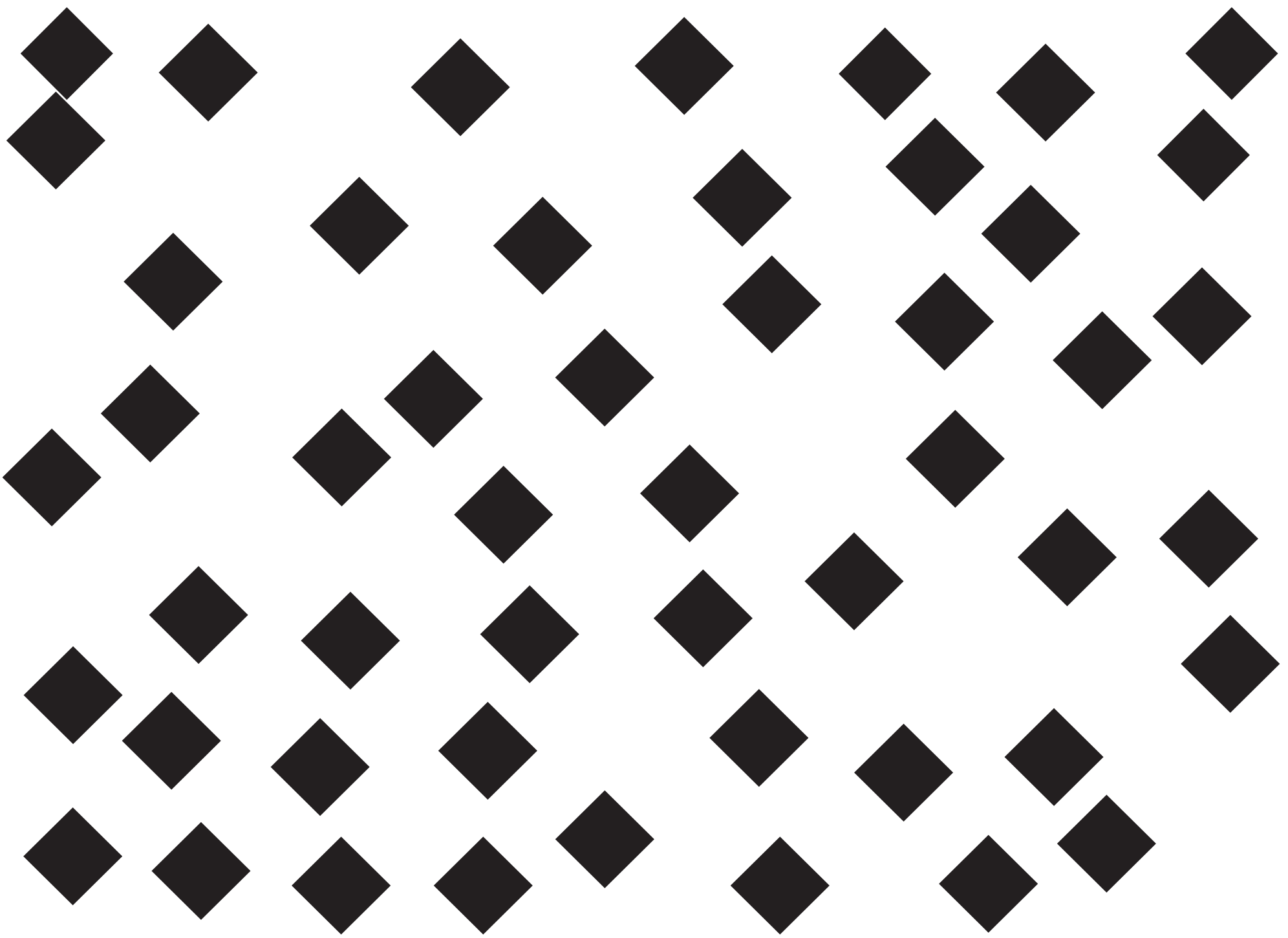
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forty-nine



fifty

Computer-Like Math Skills Learned in Infancy!

Can infants learn math a few months after they are born? Yes, according to early childhood specialist Dr. Makoto Shichida. Shichida tells how infants learn by absorbing information through the right brain. He challenges the traditional belief that math is primarily a left brain activity by proving that children can learn to calculate subconsciously through the right brain.

Japanese studies have shown rapid calculation abilities stem from the brain's right hemisphere. In his book *Right Brain Education In infancy* Shichida cites a study at the Nippon Medical Center on Yuka Hatano who won world titles for mentally calculating sixteen digit problems faster than a calculator. Professor Yoshiya Shinagawa studied Ms. Hatano by PET scan while she was orally doing mental arithmetic. Shinagawa noted that the rear part of the right brain that governs visual functions was used.

The answers appear on the screen of the mind! These so-called math geniuses don't make conscious mathematical calculations! Answers automatically rise from the subconscious, where they are calculated faster than a calculator! Through the right brain, or image brain, the person sees a picture of the right answer. This function of the right brain is also exercised in people who have photographic memory. Shichida mentions 18th-century mathematician and physicist Leonard Euler who memorized books while ruffling through the pages and correctly answered 15 digit math problems in a second. Mentally handicapped people have also demonstrated this ability, baffling scientists. Shichida gives the example of Flure, a blind, mentally retarded man who spent his life in a French mental institution at the beginning of the century. Flure could answer complex math questions in less than 30 seconds and give perfect 20 digit answers.

Today, Shichida proves these extraordinary abilities can be developed in ordinary children, given the right training. Shichida uses dot cards and fact cards to stimulate 'lightning-rapid' calculating ability and

photographic memory, which he believes are normal functions of the right brain. These flash cards are rapidly flashed in front of infants and young children who register the information subconsciously. Shichida explains that unlike the left brain, the right brain absorbs information very quickly.

In his book, Right Brain Education in Infancy, Shichida provides many examples of children who excel at calculating at a very early age, having been shown dot flash cards over a period of time. One mother witnesses her son's progress. "I've been teaching him all kinds of knowledge with homemade flash cards and charts that I placed in my house since his birth. He started answering mathematical problems in writing at age two and a half years old. He has no problem solving the four rules of arithmetic in four to six digits.

Lightning-rapid calculating ability is stimulated with dot flash cards, where dots replace numerals. "We took up dots when my son was two months old," says another mother.

"Since he could not sit up by himself yet, I showed the cards to him while he was lying on his back. I was not sure if he understood what I was doing with him, but I kept on showing the cards as one of our games. When he was five months old, I showed him five addition problems using dots, then I tested him by giving the problem $48 + 29$. I held up two answer cards 77 and 78. He tapped the card with the right answer—77. Then, I showed him only five subtraction problems and tested him. He gave me a correct answer again. I was totally amazed. Seeing my own son master addition and subtraction in a matter of ten seconds. I felt as if I was watching a magic trick. In this way, he was able to master the four rules of arithmetic by the age of six months."

Teaching your child with flashcards:

- 1) Experts agree that flashcards should be shown quickly (1 card per second). Presenting information quickly triggers the right brain into action!
- 2) Sessions should be brief but they can be frequent.
- 3) Flashcards should be fun and children shouldn't be forced. When children are pressured against their will resistance shuts down right brain learning.
- 4) Parents need to be relaxed and have fun with the process. Love is a key ingredient! Shichida and Doman differ somewhat in their methods. Doman uses repetition (left brain), while Shichida does not (right brain.) You may want to experiment or try a combination of both, a whole brain approach.

Glenn Doman's book [How to Teach Your Baby Math](#) gives detailed instructions on using dot cards. You can download Math Diamonds and use them in the same way that you would use dots.

Glenn Doman says that 'dots' are his copy written material, and so I have no dot cards to offer, only diamonds, which will work the same.

Learning in the Womb

Information for this article is taken from the book Right Brain Education in Infancy by Dr. Makoto Shichida, world-renowned founder of over 350 Child Academies in Japan. How does a baby learn in the womb? According to child brain development specialist Dr. Makoto Shichida of Japan, the answer can be found in the right brain hemisphere. Also called the image brain, the right brain is active during gestation. Furthermore, the imaging right brain is the center for extra sensory perception, or ESP.

Because cells are sensitive and can transmit subtle energy patterns to the brain, a child has extra sensory perception in the womb. The unborn baby uses the cells of his developing body to gain information from the world around him, which is transmitted to his right brain hemisphere.

Unless there is interference, the right brain hemisphere is capable of putting extra sensory impressions on the screen of the mind, which is how it got the name image brain. Young children are highly receptive when it comes to extra sensory impressions because the left brain is not dominant in children up until the age of six or seven.

Dr. Shichida found that young children can be easily trained in ESP and that babies in the womb have ESP. He believes this is because the fetal right brain hemisphere is active while the left brain hemisphere is dormant.

The anecdotal evidence from Dr. Shichida of children having had awareness in the womb and of knowing things they could not have otherwise had knowledge of is very convincing.

This opens up a whole new field of education. It is my hope that mothers and fathers will take this information seriously and apply it. I think it would be the greatest educational experiment ever undertaken. There are so many extra sensory impressions that parents can give to a preborn child – pictures of beautiful artwork, statuary and architecture, recordings and videos of fine music, ballet, classical and traditional dance, the world's best literature, science and math. The possibilities are endless and flashcards can be a big part of the program!

A warning must be sounded, however, distorted or grotesque imagery can adversely effect the preborn baby. Advocates of learning in the womb advise that the child should be shielded from coming into contact with what is modern art, especially when the subject matter is disjointed, asymmetrical, deformed, mechanistic, weird, has loud or muddy colors. Music should be soothing and not rock etc.

Link to an article on the effect of music:

<http://www.internationalparentingassociation.org/Music/studies.html>

This sort of thing goes along with the advice that pregnant mothers belong in pleasant and peaceful surroundings and they should stay calm. So whatever you chose to do with your baby in the womb, providing material that is beautiful, harmonious, uplifting as well as interesting is key.

To download flashcard and learning materials go to:

<http://www.internationalparentingassociation.org/Materials/index.html>

Photographic Memory and The Image Brain

Information for this article is taken from the book *Babies Are Geniuses* by Dr. Makoto Shichida, world-renowned founder of over 350 Preschool Child Academies in Japan.

Another name for the right hemisphere of the brain is the image brain. According to Dr. Makoto Shichida of Japan, it is this part of the brain by which we see when we are imagining or dreaming. Furthermore, the right brain can create mental images from information gotten from the cells of the body which is the basis for extra sensory perception.

Having a photographic memory allows immediate access to information stored in the memory. The person with a photographic memory can recall any information from any book he has read or page he has seen. Each page can be viewed on the screen of his mind as if it were a snapshot.

Because the right and left brain hemispheres function as opposites they also compliment each other. The left brain is conscious and logical, takes in information slowly and likes repetition. The right brain is subconscious and intuitive, takes in information quickly and requires no repetition. Presenting information slowly and repetitively exercises the left brain, while flashing information to a child, quickly, stimulates the right brain.

By age six or seven the left brain is dominant, but before age six there is a window of opportunity where the right brain is dominant. Shichida says that presenting large amounts of information at a fast pace to infants, toddlers and preschoolers stimulates the right brain and can activate photographic memory.

Research shows that young children benefit from being shown flashcards such as phonograms, word cards and math cards if sessions are happy, relaxed and brief, and cards are presented quickly. Material can always be new and interesting with different pictures, words, facts or problems.

If you want your baby to develop a photographic memory and other right brain abilities that include speed-reading and computer-like calculating ability, try using flashcards. Download flashcards at:

<http://www.internationalparentingassociation.org/Materials/index.html>

www.InternationalParentingAssociation.org