Attention and Memory:
A Stress-Point Learning Approach

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Add Stress-Point Learning to your Lessons

- Use to tune up student's alertness, attention, & brain organization.
  - At Start of Lesson
  - To re-energize when attention or motivation sags during lesson
- Use to help students with learning, attention or coordination problems.
- Use as a reward at end of lesson.
- Share approach, tasks with parents to use at home.

Why the Trampoline?
Rhythmic Learning Organizes the Brain

- The trampoline is fun and children love bouncing. It's like a big metronome with the jumper as the pendulum beating a steady beat.
- Rhythmic learning primes the brain to be more open to incoming information, develops precise, rapid and graceful neural processing, and organizes actions for goal attainment.
- Can also be done with metronome, bouncing on physioball, clapping, walking, etc.

Stress-Point Training brings Flow-State Learning:

- The guiding principle and ultimate goal is achieve flow-state learning performance. This is an active, engaged conscious state where senses are fresh, instinct guides action, and the past, present and future merge into NOW.
- Optimal learning is a special state of conscious learning that sometimes happens to us but we don't know how to make it happen. Our goal is to train the brain to reach this state..
- Unless children are trained to mastery levels, where performance is not merely accurate but is automatic, graceful and expressive, they never learn flow-state learning consciousness. Unless they know how good it feels they won't become attracted, addicted to it.
- The strategy is to work towards the flow-state, nurture it, strengthen it and make it automatic, easy and sustaining.

Stress Point Learning

- The teacher's job is to carefully choose tasks that help students attain and increase flow strength.
- With a success-oriented, nonjudgmental attitude, the teacher coaches the students' movement, cognitive, emotional self-control and goal-directed, self-organizing skills.
- Students learn to confront challenges enthusiastically and objectively and to succeed in the real world with greater efficiency.

Finding the Stress Point Learning Window

- Start training with an easy task.
- Then carefully increase the difficulty (speed, word length, more words and complex rules) until they first start to make errors**.**
- This is the patient's **stress-point window.** It's within the reach but takes effort and may several failed tries to before they can succeed.
- Work at this level, observe learning behavior, reduce the challenge at the first sign that their attention or motivation begins to falter.

After success, raise the stress-point challenge

- With each success new, more difficult tasks are given with care to insure they are within the stress point learning window. As the patient learns to perform at this higher level, a new set of more subtle problems appear. And the student is coached toward better learning processes.
- The new tasks are chosen according to each student's unique needs. As harder tasks are mastered, awareness sharpens and ability grows.
- As performance increases to higher levels, positive behaviors are rehearsed until they become automatic and replace old negative habits.
- Brain chemistry, neural networks, and brain organization improves bringing greater attention, memory and self-confidence
- Thus learning deficits are eliminated.

In their effort to succeed at stress-point tasks, the student's learning blocks and negative learning habits are revealed.

- Once out in the open, these can be identified by the therapist who helps the student know the difference between feeling alert, focused and organized and when they are not.
- Students are made aware of their negative learning habits and are trained to develop positive habits that change their learning

Look for Negative Stress Point Behaviors

- Loss of attention (span, depth, recovery)
- Loss of coordination (timing, balance, grace)
- Dependency (need mom to protect them)
- Frustration (helplessness, anger at self, trying harder makes it worse)
- Avoidance (makes excuses for not wanting to try)
- Defiance (blames you for failure, fights you)
- Fatigue (too tired to go on)

Pepper's Five Questions
to achieve mastery.

- Can I do it?
- Can I do it well?
- Can I do it well every time (whenever and for as long as I want to)?
- Can I accept change (do it at different speeds, with different information, in different circumstance -in front of an audience)?
- Can I do it in the flow-state (creatively, artistically, inventing, and experimenting on the go)?

Teach beyond competence

Most people feel finished learning when they can answer yes to question one. Unfortunately most educators and parents stop too soon. They don't teach beyond competence. They leave children with half-baked brains.

Recovery of Attention

- Instructions to student. If you make an error,
  1. Stop immediately
  2. Recall the error
  3. Describe the error
  4. Start again from the beginning
- Steps toward recovery
  1. At first they don't notice their error
  2. They know there was an error but can't describe it
  3. The stop and can describe the error
  4. They immediately notice the error, try to recover but fail to do so
  5. They prevent the error as it is happening but the effort is so great the make another error on one of the next symbols
  6. They recover from making the error and can keep going without a subsequent error
  7. "Precovery," They notice their mind wondering so quickly that they prevent the error without anyone being aware of it.

Stress Point Learning

- Completion of an exercise requires more than calling out correct letters at the right time. Students are held to the task until a flow-state is mastered. Learning to rise to the occasion, release conscious control and to flow through the experience from beginning to end without error becomes the new habit. When in flow the voice becomes fuller, confident, and more precisely on the beat. The eyes, face and body look alert and aligned with present action.

Pepper's Game Plan for Growth

IN THE BEGINNING

AVOID DIFFICULT TASKS

THAT MIGHT CAUSE A PATIENT TO FAIL.

Failure weakens rather than strengthens attention. When patients are threatened by failure they will fight the therapy and resist the therapist to defend themselves against looking stupid.

ESTABLISH TRUST & COMMUNICATION

1. The first goal is to establish therapist-patient trust and communication by starting the training with easy tasks in the patient's strong area of ability.

2. As trust is increases, the task difficulty is *gradually* increased very *carefully* to insure success.
3. Success strengthens attention and organizes the brain. Patients feel rewarded and motivated to work harder

TRAINING THE WEAK AREAS

- Once the patient is alert and ready, begin to introduce tasks that *challenge their weak abilities*.
- Their learning blocks are exposed when challenged in their weak areas.
- If weak abilities and blocks are not eliminated at this stage, they will always be there inhibiting optimal learning.

STRATEGY FOR TRAINING SUCCESS "ROCKING OUT"

- The training proceeds by pushing gently to extend the range, then backing off a little to reorganize, then pushing again, etc.
- Make the steps small enough to keep within the patient's range of ability.

Product Oriented Learning

- When people are **product oriented** they focus so much on the end goal that they neglect to look for more efficient ways of achieving it. Instead of setting smaller sub-goals, they rush ahead without thinking about whether it's too great a challenge for them. If they don't reach it right away, they become disorganized, frustrated and they stop trying.

Process Oriented Learning

- Stress-Point Training teaches patients to pay attention to the **process** of how they learn and to use this information to direct their next actions.
- How it feels to be motivated, alert, attentive and organized.
- How to self-direct their learning strategy to find their stress point learning window.
- And how to change their strategy when attention and learning start to decrease.

Talk to the patient about “Process”

1. How to get ready.
2. What it is like to realize that the task will get harder.
3. How to feel his level of organization.
4. Knowing whether or not he is in control.
5. How to finish strong and ready for the next challenge.

TEACH SELF-RELIANCE THROUGH SELF-AWARENESS

TEACH THE STUDENT TO BECOME
THEIR OWN BEST COACH

- A major goal is that the student knows as much about his/her needs, his/her negative learning behaviors and how to self-direct strategies to work through and overcome them as the teacher does. Do this only when student is ready (ego strength).

Gross Motor

Hand/Arm Movements

1) Mirror circles (up the middle)
2) Parallel circles to Right
3) Parallel circles to Left
4) Infinity ∞ alternate
5) Arm twist - extend/flex

(arms straight; knuckles face in vs. palms in)

6) Move one arm circles while other side does twists

Foot/Leg Movements

a) Apart/Together
b) Front/Back (walk in place)
c) Front/Back + center bounce
d).In/Out.+.cross.feet
e) Leg twist - flex/extend

(toes face in-heels out vs. opposite)

Gross Motor cont.

Combining Hand/Arm & Foot/Leg Movements

Hand/Arm Mirror Circles (1) while moving

a) move feet together and apart

b) move alternate feet forward and backward

c) move alternate feet as (b) + center bounce

d) In/Out + cross feet alternate

e) Leg twist — flex/extend – turn toe-to-toe alternate heel-to-heel

Combine each Hand/arm moves (2)-(5) with Foot/Leg moves a) – e)

Twist feet opposite to arms – Alternate arms twist in (knuckle-knuckle) as legs twist out (heel-heel)

- **Look for differences between sides and awkward positions/moves**
- **Work on student's awareness of being ready before moving.**
- **Timing:** Clap, say, spell on each, every second, every third, etc. bounce

SELF-DIRECTION CHART

Relax. Keep breathing. Don't stare.

This exercise teaches anticipation -- doing one thing while preparing for the next. The rules are to learn to pause for a second before moving your eyes, to move to the correct target and hold the eyes on one target while thinking of the next. It is best to start with a helper who names the objects and check for accuracy and timing. When this is easy try self-direction -- the student him/herself names the next object without moving and pauses before moving directly there. They monitors for mistakes and can say what was wrong (moved to soon, took eye off, went to wrong place).

1. Look at the star in the center of the page.
2. Without moving your eyes, choose one of the animals (eg., fish). Say it.
3. Pause one second, then move your eyes directly to the fish.
4. Without moving your eyes (keep looking at the fish), name a different animal.
5. Pause before moving your eyes to that animal.
6. Continue, working to get ten in a row without error. You may need to start with two in a row, then five and more. As the pressure mounts, so does anxiety and the impulsive loss of control --moving too soon; move before naming; go to the wrong object; move eye while waiting for next instruction.
7. They try moving to the object opposite to the one you name -- go to the fish when you say frog, for example.
8. Try with other charts.

Don't forget to breathe and pause for a second before moving your eyes. Work for ease and total control. Nothing can through you.

MORE COMPLEX EXERCISES

• Ask questions during the exercise – "What color is a crow?" or "5 + 2 = ?" What day of the week is today." Ask at various times: during the move, in the pause between naming and moving, as the next object is named, and during the mental choosing process. Repeat several times during the exercise.

• Imagine a new map, e.g., up, down, left and right. Say "up", for example, pause for a second then move to the up position. You can also use: north, south, east and west; numbers; fruits; vegetables; boy or girl names; . . .

• Move opposite for one set and the not opposite for the other. For instance, say fish and move to frog, but say right and move to right (bear).

• Rotate one set clockwise by a quarter of a turn. This means fish will be where horse was originally. Now move to new positions of the figures.

• Visualization:

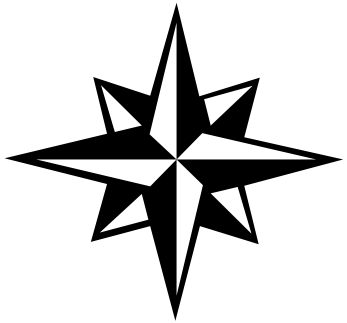
Imagined rotation by half a turn (fish rotates to frog, horse to bear, fish to frog and bear to horse.) Move to the new (visualized) location.

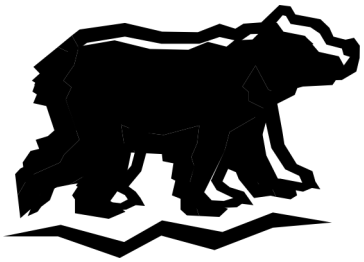
Imagined flipping: visualize that the page is flipped left to right or top to bottom.

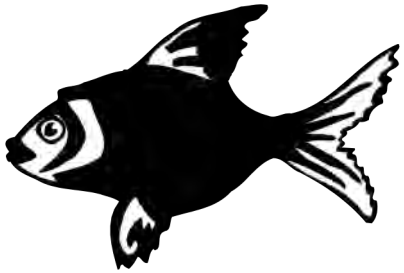
•Try several sets at once by imagining two or all three charts superimposed, One move normal, another move opposite, one rotated 90°,etc.

Ray Gottlieb, O.D., Ph.D.,

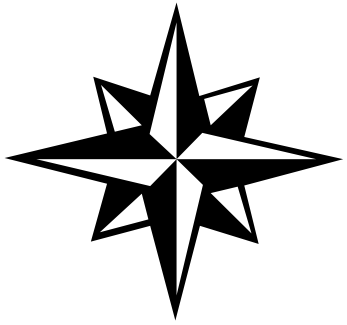
SELF-DIRECTION CHART 1

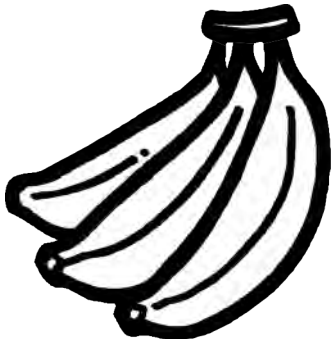




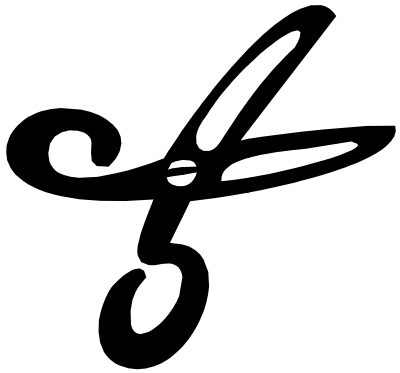


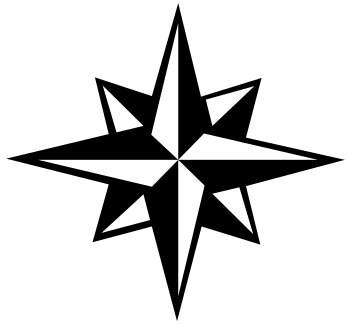
SELF-DIRECTION CHART 2

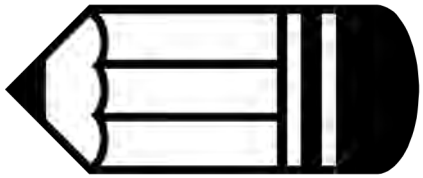




SELF-DIRECTION CHART 3







Task Sequence for Symbol Charts, Letters, Numbers, Words & Sentences

a) Read Forward from Left to Right
b) Read Backward from Right to Left
c) Read from Top to Bottom
d) Read from Bottom to Top
e) Read First then Last Alternating Toward the Middle

f) **Substitute** for designated symbol or category (e.g. vowels, spaces, odd/even numbers, color, shape):
silent bounce, clap (without saying)
count by 1's,2's,3's, spell name or other word,
categories: color, city, state, boys name, etc. (no repeating)

g) Substitute for more than one symbol eg. spaces & vowels

g) Do Above from Memory Without Looking

Reference Card

Gross Motor

Hand/Arm Work

Circles In
Circles Out
Parallel to Right
Parallel to Left
Lazy Eights-1 hand
Lazy Eights-2 hands
Arms extend/flex
One hand circles/one
Arm extend/flex

Foot Work

Apart/Together
Front/Back
Front/Back + center bounce
In/Out+cross feet alternate
One foot bounce
Two foot bounce
Quarter turns
Pigeon/Duck toetoe/heelheel
2 Right Jump 2 Left

Knee Drop/Seat Drop

Reading Charts Words Sentences

Read Forward Right to Left
Read Backward Left to Right
Read Top to Bottom
Read Bottom to Top
First and Last
Silent bounce between
Substitute/Count/clap/add turn
- On the black, odd even
- On the vowel
- On the ducks
- On the space
- On whatever you choose

Do Without Looking

Timing

Clap Every
Clap Every Second
Clap Every Third

STRESS-POINT TRAINING INTRODUCTION

These exercises build attention and memory skills regardless of age, work or level of education. Everyone benefits, even people with learning and reading disabilities, emotional problems or brain injury. With practice and patience, lasting changes take place in the chemistry and physiology of attention. Practice with others or alone, daily or less often. Make this an after school or evening families fun activity. Teachers can teach individual students or groups to attend with more power. Therapists can help patients think more clearly and help them recover lost physical and mental abilities.

FINDING THE RIGHT TASK

Effective training requires that task difficulty matches attention skills. Easy tasks give poor feedback because attention lapses don't cause errors. Easy, boring tasks decrease attentiveness, slow thinking, and shrink attention span. Overly difficult tasks disrupt attention and can cause anxiety, anger, frustration, impulsiveness, avoidance, and thwart the processes we are trying to build. Appropriate tasks, challenging but within your grasp, improve attention, confidence, pleasure and create a desire for more. Search for the challenge that matches your ability, one that takes several tries to get right and work for more than barely succeeding. Don't just squeak by. Ask yourself: can I do it well, for a long time, with distractions and pressure, with creativity. The goal is the art of mastery -- certainty, ease, fluency, and flow. Learning how to find just the right level of difficulty when attempting a new challenge is a key element for success.

TIMING AND RHYTHM

Attention suffers when timing is off. Learning problems, reading blocks, or poor performance in sports or arts are often due to faults in the brain's timing mechanisms. If the mind moves faster than the eyes, for example, reading suffers. Rhythmic learning organizes the brain, quiets negative emotions and coordinates the senses. This simple demonstration is the essence of the attention and memory training approach --

TRY THIS EXERCISE

Clap your hands in a steady rhythm, one or two claps per second. Can you keep the beat? If not, use a metronome or get a helper to clap with you. You can use a trampoline for this exercise. If so clap at the bottom of each bounce. When you can sustain a steady clap rhythm, read these numbers out loud in time with your claps.

7 4 3 9 5 6 2 9 4 7 2 3 8 6 1 4

Some do this easily on their first attempt but others have to work at it. If you can't get fluent success after several attempts, make the task easier. Shorten it by using fewer digits (eight or less) or slow it down by naming the numbers on every other beat. For a harder task: up the speed; read it backwards; lengthen it by going forwards and back three times without stopping. For more complexity try saying only the even numbers while clapping on the odds; adding one to each number; adding the numbers together as you go; or try saying the alphabet or spelling a word, alternating between the next letter between each number.

Finding the weak links in your attention and habitual negative learning patterns provides an opportunity for self-directed change. Do you reverse, skip or call out wrong numbers? Are you continually distracted by thoughts such as: "this is easy," or "I'll never make it through?" Do you falter at the start or lose focus just before the end? Can you bring your attention back when your mind wonders or do you tighten, get anxious, and stop? Do you repeat the same type of error? Can you catch yourself or must someone point your errors out?

RECOVERY OF ATTENTION

The exercises give immediate feedback when attention wonders. Attention problems stay hidden unless responses are actively expressed. Most education is passive. For example, everyone can tell if your mind wonders when you read out-loud. Read silently to yourself and pages can go by while you daydream. The eyes move but the brain is out to lunch and you can't remember what you've just read. Quick effective recovery of attention is the key to improving learning ability. Catching yourself as you make an error (recovery) is the best way to improve.

POST-FAILURE FAILURE SYNDROME

Making a simple mistake can bring immediate frustration and with it a drop in performance and avoidance. Mistakes happen at the stress-point when challenges exceed ability. Everyone fails but some people can turn up their fire while others have failure phobia or ‘post-failure failure syndrome.’ Their anxiety about failing shrinks attention causing failure even on tasks they could do easily a moment before. Repeated mistakes are just information, part of the process of learning. It's not such a big deal to make a mistake. Usually the mistake is in picking too hard a task and thinking it will be easy. Learn to think of errors as merely feedback.

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VARIOUS IMAGES TO BROADEN THE PURPOSE OF STRESS-POINT TRAINING

". . .during the next 30 years neuroscience and neurotechnology will produce a "neurosociety" in which "you will eventually be able to continuously shape your emotional stability, sharpen your mental clarity, and extend your most desirable sensory states until they become your dominant experience of reality."

Vision allows us to be active participants in our world, continually moving through it and molding it to our needs and desires.

We are working to change brain function: systems of memory, perceptual categorization, reasoning, planning, evaluation of alternatives, decision-making, voluntary direction of attention, and more generally, rational control of action.

Visual Naming Speed
Fluent reading -- *Fluency is not an end in itself but a critical gateway to comprehension. Fluent reading frees resources to process meaning.*
For students to develop fluency, they must:
Perform the task or demonstrate the skill accurately, and
Perform the preskills of the task quickly and effortlessly.
Once accurate, fluency develops through plentiful opportunities for practice in which the task can be performed with a high rate of success.

The five questions:
Can I do it?
Can I do it well?
Can I do it well for as long as I like whenever I try?
Can I accept change?
Can I be creative and expressive as I do it? (Flow state: altered sense of time; one-pointedness of mind, action and awareness merge; loss of self-consciousness, irrelevant stimuli disappear from consciousness, worries and concerns are temporarily suspended; a sense of effortless control; experience becomes worth doing for its own sake; transcendence of ego boundaries, a sense of growth and of being part of some greater entity)

From ***William James Talks to Teachers*** http://www.des.emory.edu/mfp/james.html
The teacher's prime concern should be to ingrain into the pupil that assortment of habits that shall be most useful to him throughout life. To break up bad associations or wrong ones, to build others in, to guide the associative tendencies into the most fruitful channels, is the educator's principal task.

We must make automatic and habitual, as early as possible, as many useful actions as we can, and as carefully guard against the growing into ways that are likely to be disadvantageous. The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our higher powers of mind will be set free for their own proper work.

A teacher "must start with the native tendencies, and enlarge the pupil's entire passive and active experience. He must ply him with new objects and stimuli, and make him taste the fruits of his behavior, so that now that whole context of remembered experience is what shall determine his conduct when he gets the stimulus, and not the bare immediate impression.

SELF-EFFICACY BELIEFS (Albert Bandura)
Self-efficacy is the belief (whether or not accurate) that one is capable of performing in a competent manner to attain a particular goal, that one has the capabilities to execute the courses of actions required to succeed. Self-efficacy relates to a person's perception of their ability to reach a goal, whereas self-esteem relates to a person's sense of self-worth.

One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. Self-efficacy beliefs are cognitions that determine whether an effort will be initiated, how much effort will be expended, and how long it will be sustained in the face of obstacles and failures. Self-efficacy influences the challenges that people take on and how high they set their goals. People with high self-efficacy -- that is, those who believe they can perform well -- are more likely to view difficult tasks as something to be mastered rather than something to be avoided, whereas a person with low self-efficacy would harbor feelings of hopelessness.

People will be more inclined to take on a task if they believe they can succeed. People generally avoid tasks where their self-efficacy is low, but will engage in tasks where their self-efficacy is high. People with a self-efficacy significantly beyond their actual ability often overestimate their ability to complete tasks, which can lead to difficulties. On the other hand, people with a self-efficacy significantly lower than their ability are unlikely to grow and expand their skills.

People with high self-efficacy in a task are more likely to make more of an effort, and persist longer, than those with low efficacy.[6] The stronger the self-efficacy or mastery expectations, the more active the efforts.

Low self-efficacy can lead people to believe tasks are harder than they actually are.[8] This often results in poor task planning, as well as increased stress. Observational evidence shows that people become erratic and unpredictable when engaging in a task in which they have low self-efficacy. On the other hand, people with high self-efficacy often take a wider overview of a task in order to take the best route of action. People with high self-efficacy are shown to be encouraged by obstacles to make a greater effort.

Self-efficacy also affects how people respond to failure. A person with a high self-efficacy will attribute the failure to external factors, where a person with low self-efficacy will attribute failure to low ability.

"Mastery experience" is the most important factor deciding a person's self-efficacy. Simply put: success raises self-efficacy, failure lowers it.

CLAP-TURN SEQUENCES

Impulsive people start doing things without their wits about them. They go into action before they are ready and without thinking about what comes next. No ready-set-go, just go. They lack self-control, can't wait until the right time and then get jammed up by trying to do everything all at once. Are they anxious because they are impulsive or impulsive because they are anxious? Performance and new learning suffers, they are thrown off balance and are vulnerable to negative emotions.

This exercise trains self-direction - the ability to be ready for what you are about to do before moving into action. It also trains laterality - left/right awareness at an automatic level.

BASIC EXERCISE

The best way to do this is on a trampoline, small or large sized, but it can be done jumping on the ground or on a thick piece of foam. It can even be done while jumping rope. The game is played as follows:

Start jumping and after a few jumps say a direction ("left" or "right") in a loud distinct voice. Say the word exactly at the rebound of the bounce. On the next bounce, say nothing (this is called the "control" jump). Then turn 90° in the direction called out. The sequence is very specific:

1st jump- the command "left" or "right" is given precisely on the bounce

2nd jump control jump, bounce without doing anything

3) turn,

4th jump facing the new direction, continue jumping and after several jumps, repeat 1-4 by announcing another "left" or "right" to start the next sequence. The goal is to perform ten correct sequences in a row without turning in the wrong direction or turning before the control jump.

It is very difficult for some people to stop themselves from turning immediately after the left/right command rather then delaying the turn until after the control jump. They don't even realize that they skipped the extra control jump. It is useful to have a partner or helper to point out this error or if they turned the wrong way (left when they say right).

The helper can also serve another function by calling out: "left" or "right," instead of the player. They must try to say the command clearly and timed exactly on a jump. This process of having the helper call out the command is especially useful for people who have a hard time making decisions. Start with the helper calling the command than have the jumper say it.

ADVANCED EXERCISES

COUNTING - The game is played as above but the player must count the turns they have made. As they land after making the first turn they say: "One." (The silent bounce comes before, not after the turn. The count come immediately after the turn. After the second turn, "Two," is called on the jump immediately after the turn. For example: jump, jump, jump saying left on the bounce, control jump, turn left, jump-say, "One;"

jump, jump, jump-say, "Right," control jump, turn right, jump-say, "two;" jump, ...jump, jump-say the nth left or right, control jump, turn for the nth time, jump-say, "n." The player must remember the correct number and say it on the appropriate jump.

TURN AND CLAP - This is done as above but two new commands are added: "Clap-left," and "Clap-right." When one of these is called out, the player then takes a control jump, makes the turn and claps his/her hands as they land. On the jump the clap, the count is said. For example, on successive bounces: "Clap-right", control jump, turn right, clap, "one" and continue on. The task is to say all of the possible directives: "Left," "Right," "Clap-left," or "Clap-right" at random for at least ten in a row with no errors. What makes this difficult is that the jump following the turn sometimes requires a number and other times a clap. This takes self-control and self-awareness. The math problem can be added at this level also.

SPELL YOUR NAME - To make the task even more complex, try spelling your name or another word as you take the control jump. This can be added to any of the sequences described here. Other words can be also be tried such as sports terms or the names of other players on the team or famous sports figures.

Other complicating tasks can be added into the game depending upon the player's ability and the trainer's imagination. The number of times in a row without error can be increased to twenty or more. Or you can make a contest to see who can do it the most times. Remember to keep it fun and motivating.

BIG

ATE

FUNNY GREAT

JUSTICE JUST ICE

CALIFORNIA MISSISSIPPI

THIS GIRL CAN JUMP WELL

WHEN WILL WE HAVE FUN

WE LOVE TO SAIL ON
A SEA OF BLUE

THE PLAYERS ATE A TASTY
LUNCH IN WASHINGTON
WITH A GOOD OLD FRIEND

LETTER CHART

O F N P V D T C H E

Y B A K O E Z L R X

E T H W F M B K A P

B X F R T O S M V C

R A D V S X P E T O

M P O E A N C B K F

C R G D B K E P L A

F X P S M A R D M G

T M U A X S O G P B

H O S N C T K U Z L

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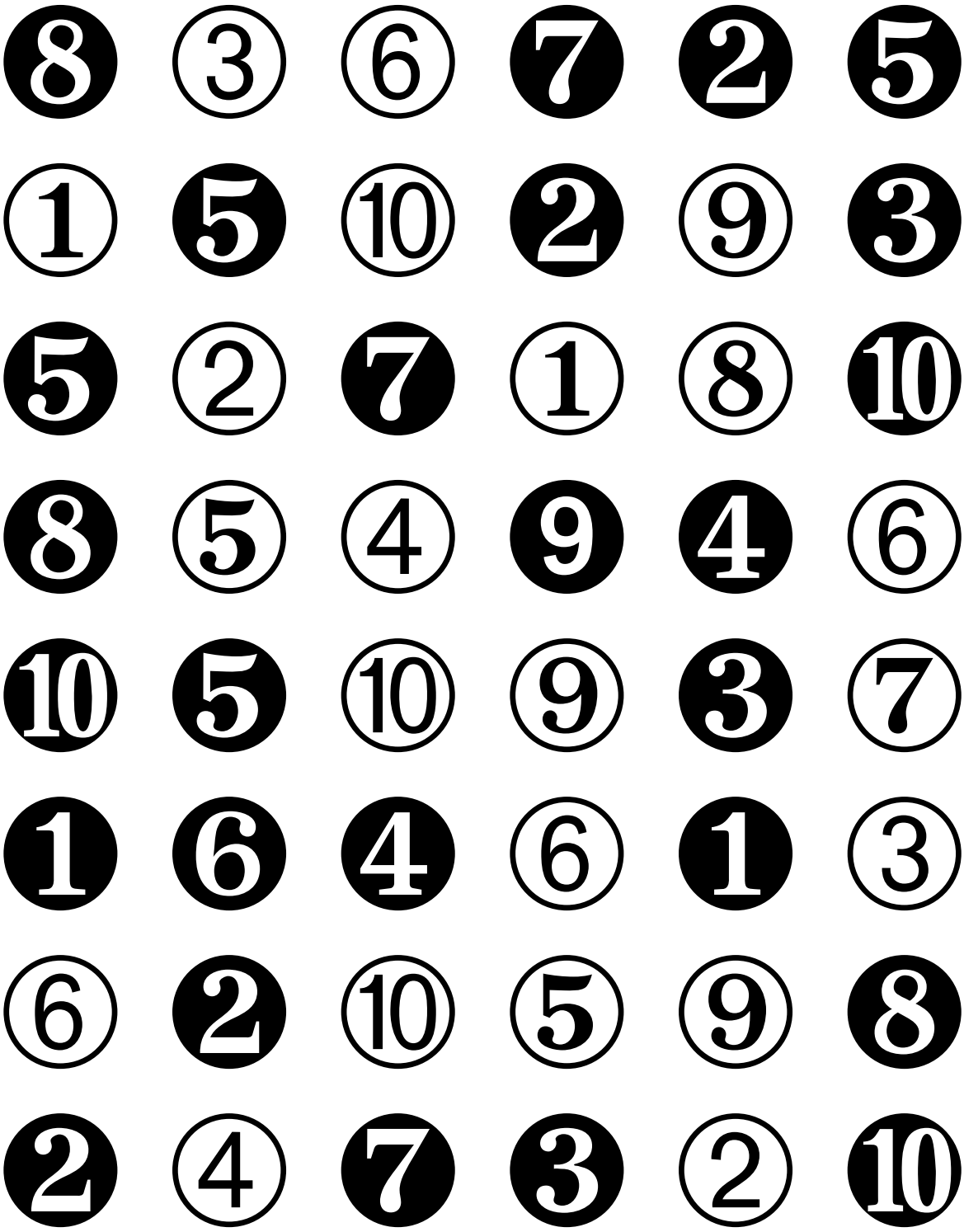
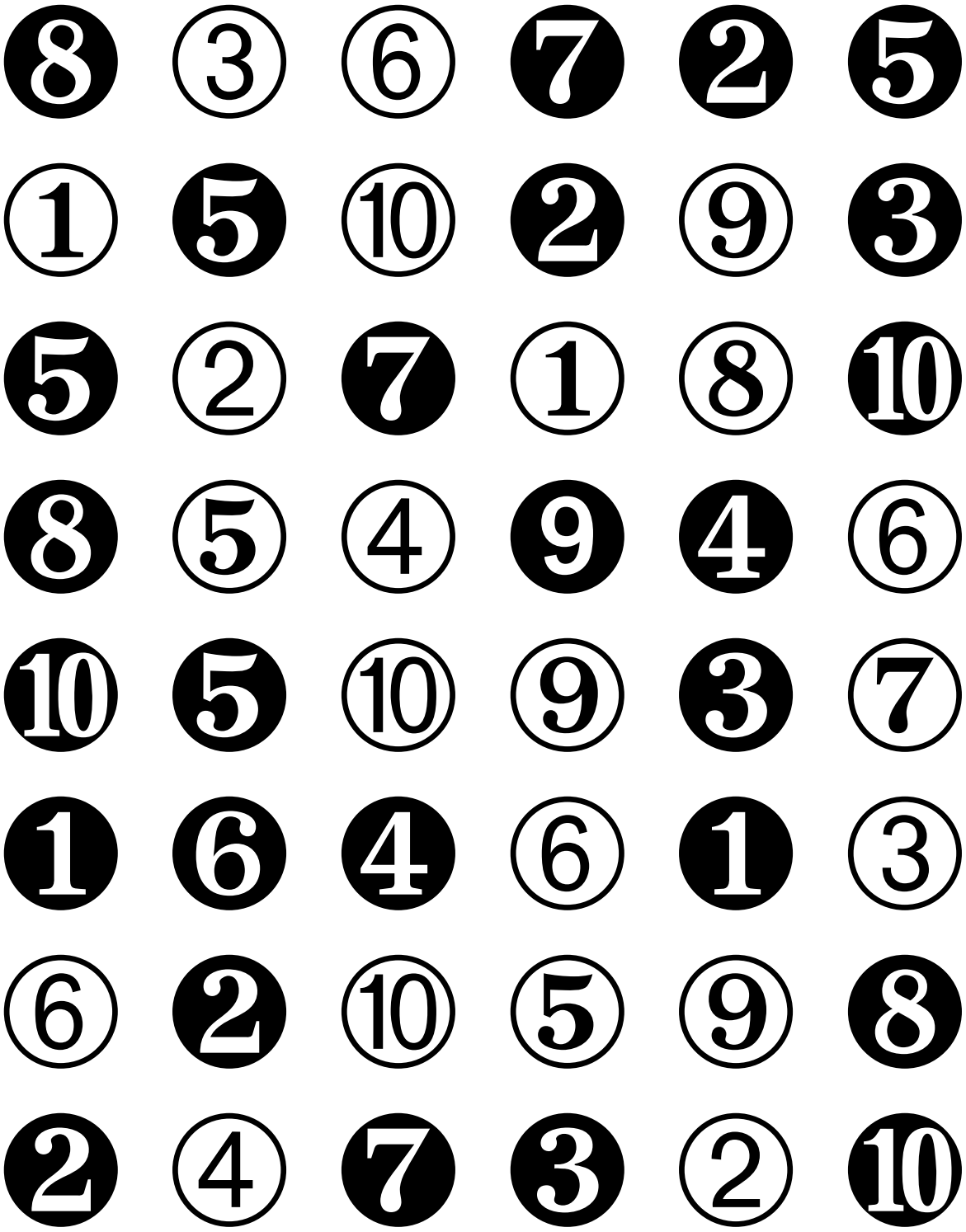
BLACK AND WHITE NUMBER CHART



NUMBER CHART

5	25	13	32	27	39
12	29	8	19	45	2
48	34	11	42	15	37
9	18	33	1	22	4
16	23	41	30	40	43
3	28	14	44	6	47
26	31	38	46	10	20
7	21	36	24	17	35

BLACK AND WHITE NUMBER CHART



ARROW CHART INSTRUCTIONS

General procedure: Say up (or down, right or left) while moving the arms in the up direction. The word is said and arms move simultaneously, not arms first and then say the direction or say and then move. Both occur simultaneously.

The arms move together with the palms facing in the direction of the named movement. When moving up, the palms face up. Palms face the floor on downward movement. Palms face left on left movements with the left hand positioned above the right. The opposite for movements to the right, palms right, right hand higher. Practice few times to be sure it's correct. Arms move as if under water, smoothly without jerking.

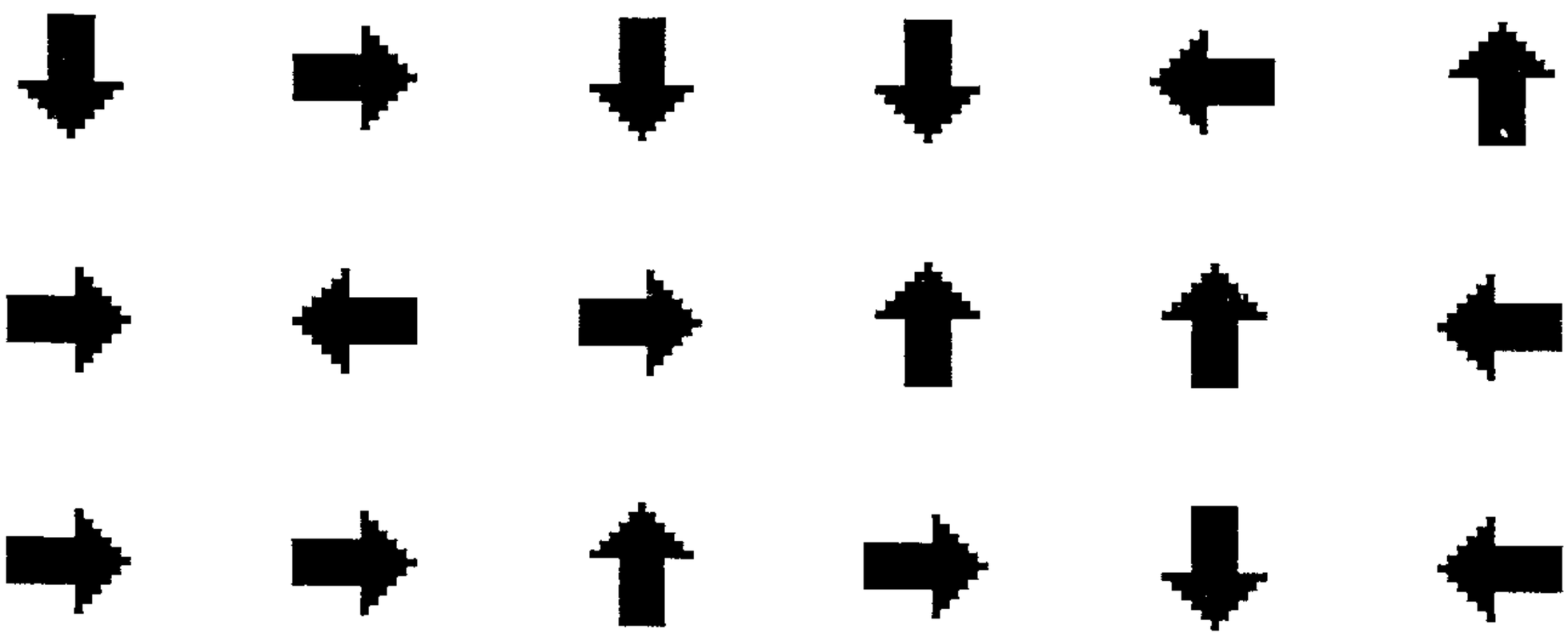
First, try it slowly. Then work for the best speed – as fast as possible without an error. Find the best speed and try to maintain a consistent or regular tempo. As the tasks are made more complex, the best speed should be slower to prevent error. It's not a speed contest but an awareness contest. The goal is to develop a sense of what you need to do to feel confidence and flow as you train your attention to learn fluent performance in the face of complexity. Doing this to a metronome beat, bouncing on a gym ball or jumping on a trampoline can aid this process but doing it with a regulated, self-generated tempo is the highest skill.

The arrows are to be read in sequence, one arrow at a time. Start from the upper-left arrow and proceed as in normal reading. Vary the chart by turning it bottom to top or sideways. The arrows can be read from the bottom-right in backwards order or up or down the columns vertically. Simplify the more difficult tasks by reducing the tempo or doing just one line. Work for automatic performance and to succeed three times in a row without error. Add speed as you get better.

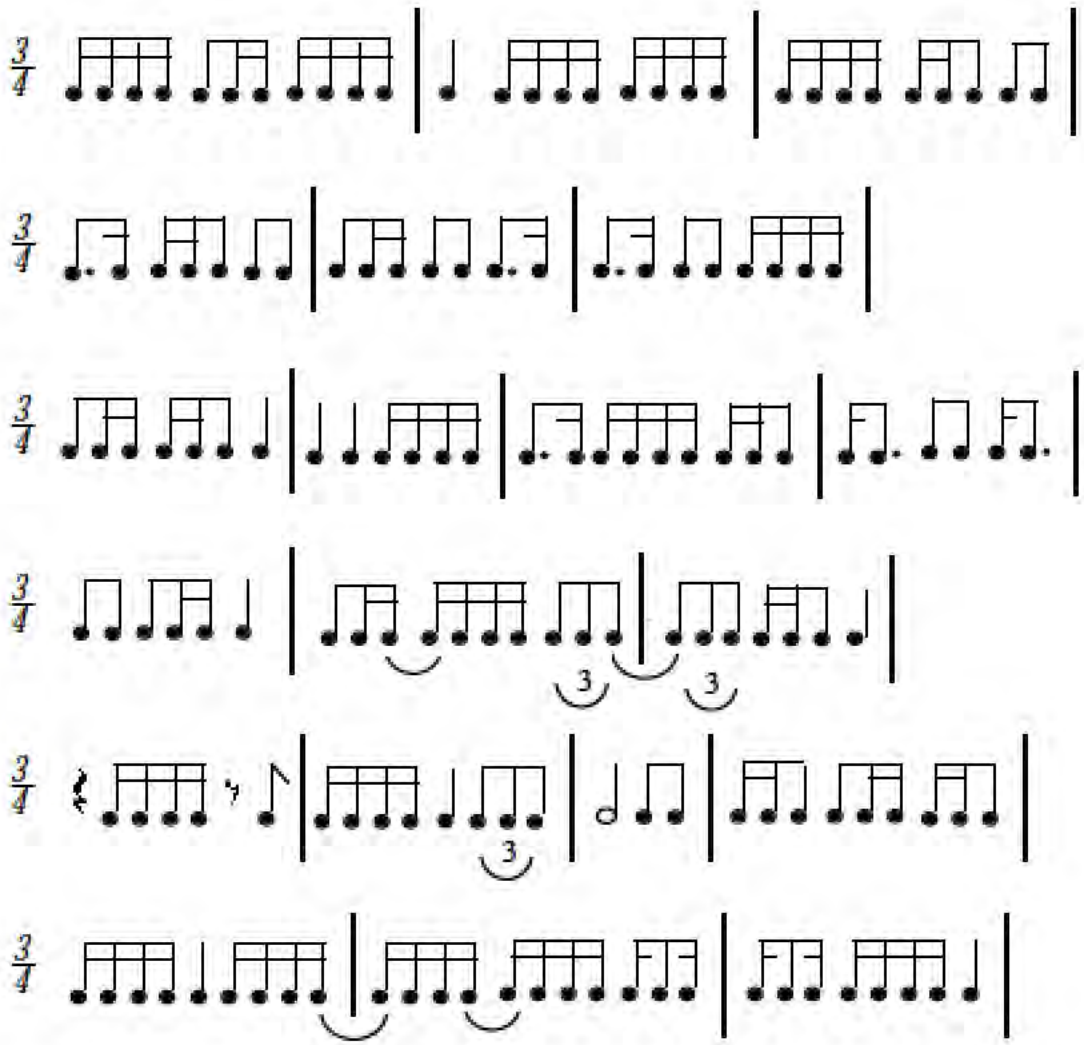
TASKS
1) Say the same and move the same. Say and move up for up arrows.
2) Say and move opposite. Say and move down for up arrows.
3) Say the same but move opposite direction. Say up and move arms down
4) Say the opposite but move the same. Say down but move up.
5) Mixed instruction. Alternate by doing 3) on one line and 4) on the next. Alternate every 3) & 4) other or every third arrow.

Notice how attention comes and goes, how it feels when the instruction suddenly falls out of consciousness. It helps to repeat the instruction (say the same, move the opposite) before starting. The rule is to stop and start again at the beginning when an error is committed..

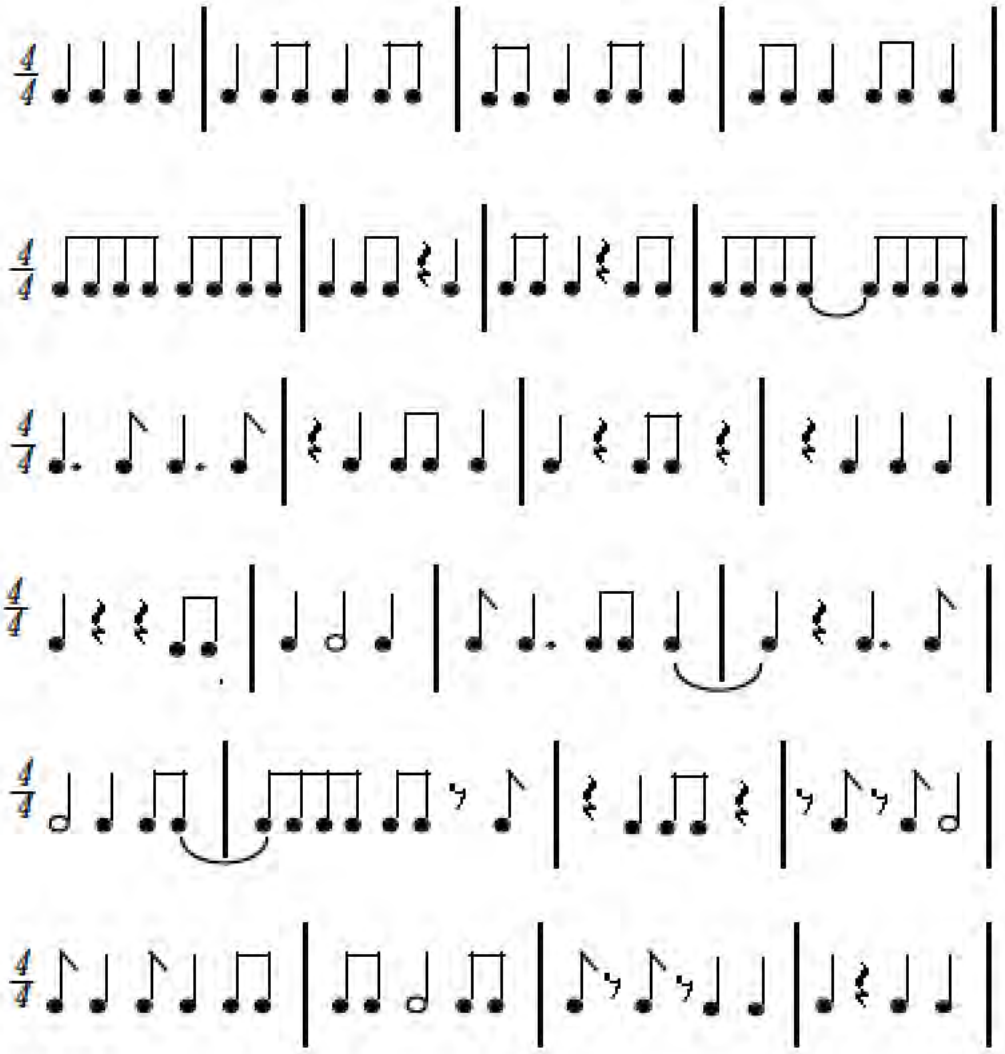
ARROW CHART



THREE /FOUR CHART



FOUR /FOUR CHART



TWO CLEF RHYTHM CHARTS

1. Begin by feeling the bounce or beat with your whole body. Use a trampoline, ball or something similar. Don't forget breathing.

2. The treble clef is the right hand, the bass clef is the left hand. Read the rhythms of both hands (clefs) simultaneously tapping them out on your thighs. Add extra bounces at the bar lines, either four or two. Work to get through the exercise three times in a row without making a mistake.

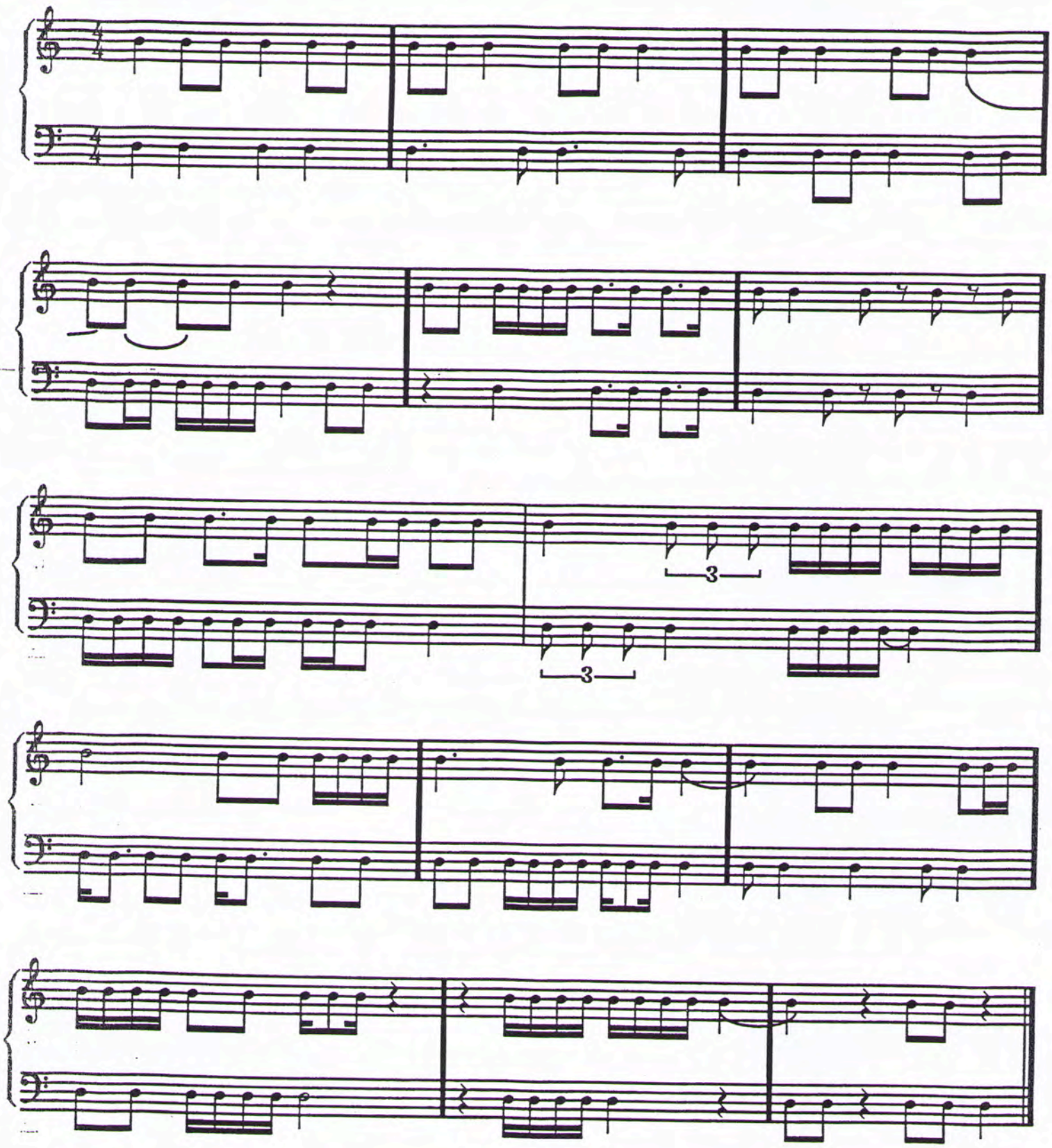
3. Do this in all variations, from left to right, skipping bars, and changing the sequence of lines. Have someone point to the bars at random.

4. Do the chart again, this time taking out the extra bounces. When you can do this speed up the tempo.

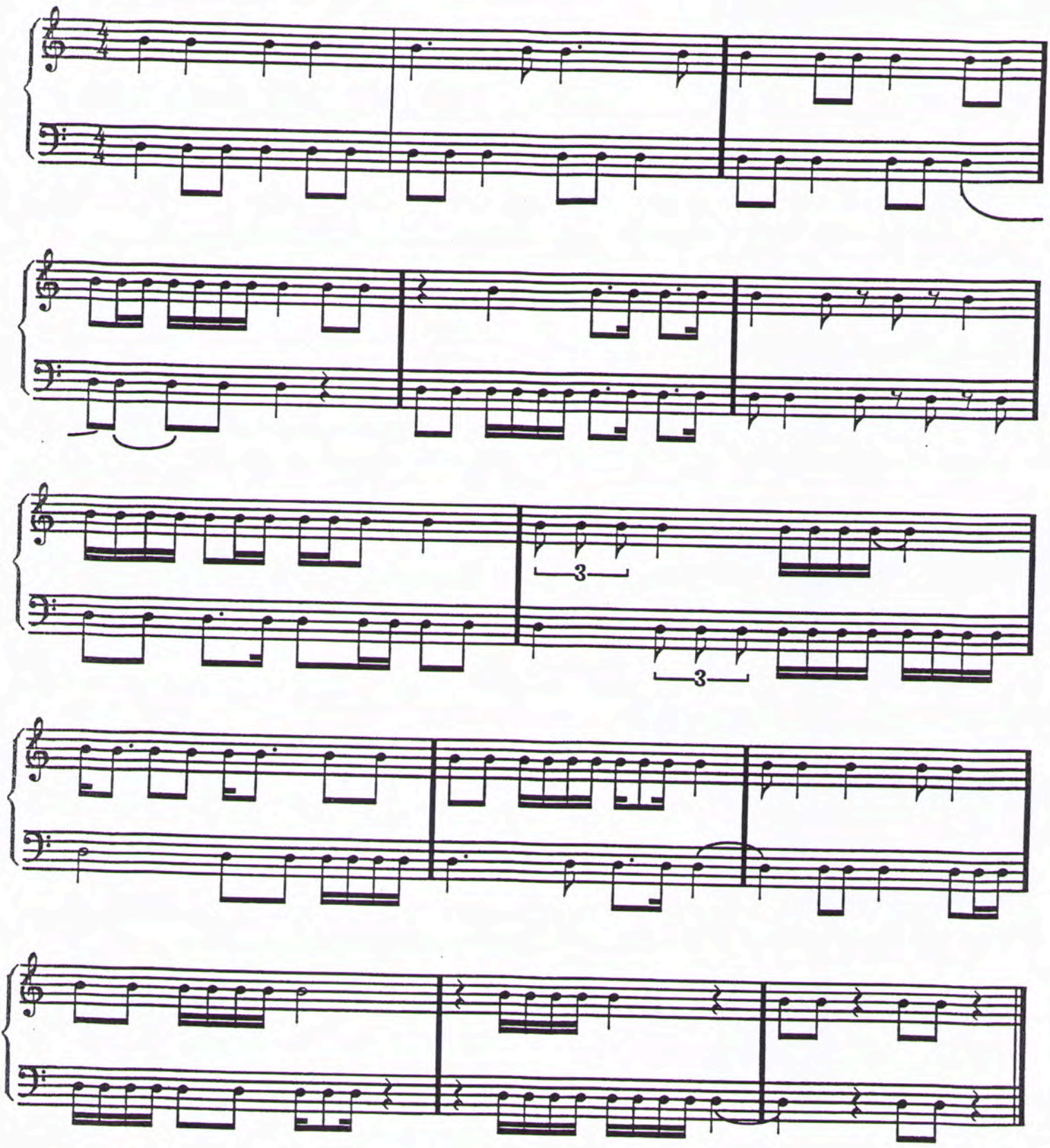
5. Be sure to do this all the way through using your legs to keep the pulse. Right/left/right/left and left/right/left/right.

6. Before going onto the next chart do this with your hands crossed, right over left, and then left over right. The right hand reads the treble clef, the left hand reads the bass clef always.

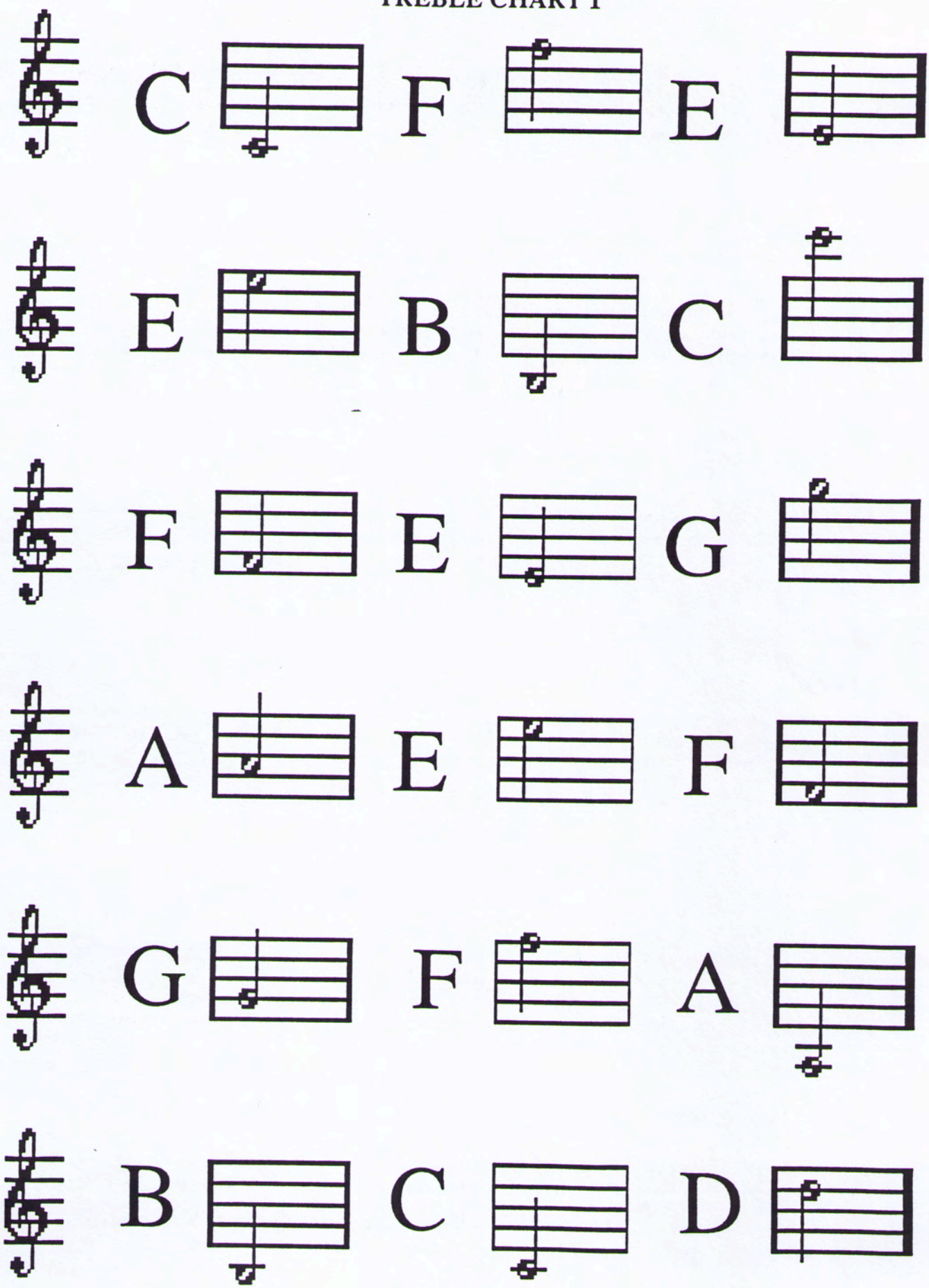
TWO CLEF RHYTHM CHART 1



TWO CLEF RHYTHM CHART 2



TREBLE CHART 1



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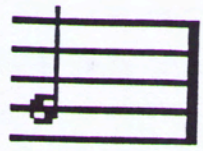
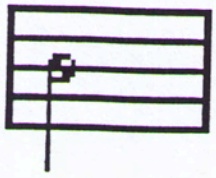
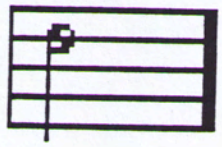
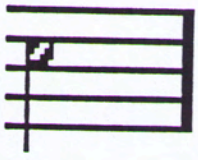
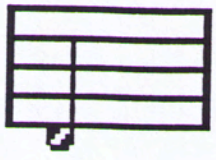
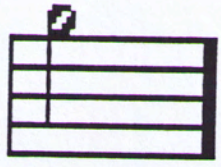
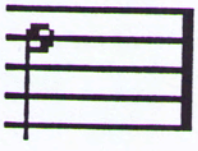
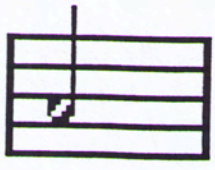
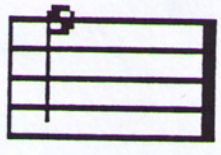
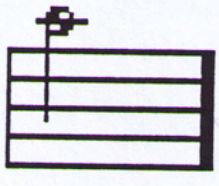
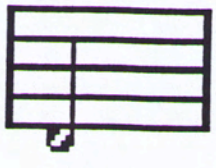
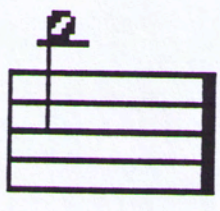
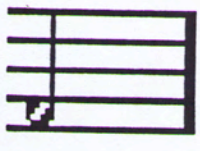
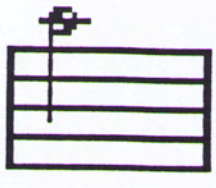
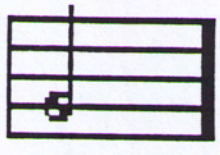
G  B  D 

C  D  G 

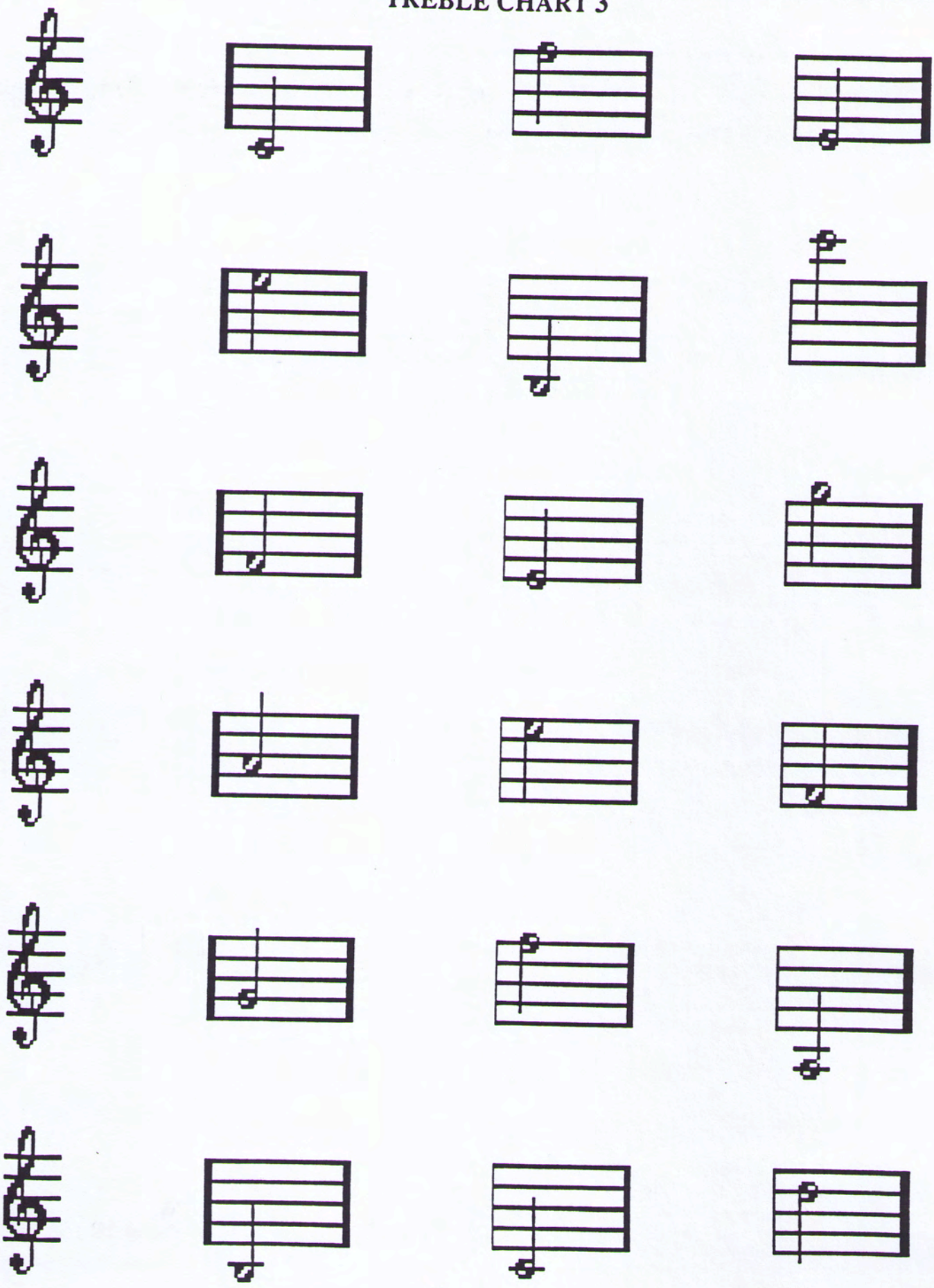
D  A  F 

C  B  A 

B  D  B 

F  A  G 

TREBLE CHART 3



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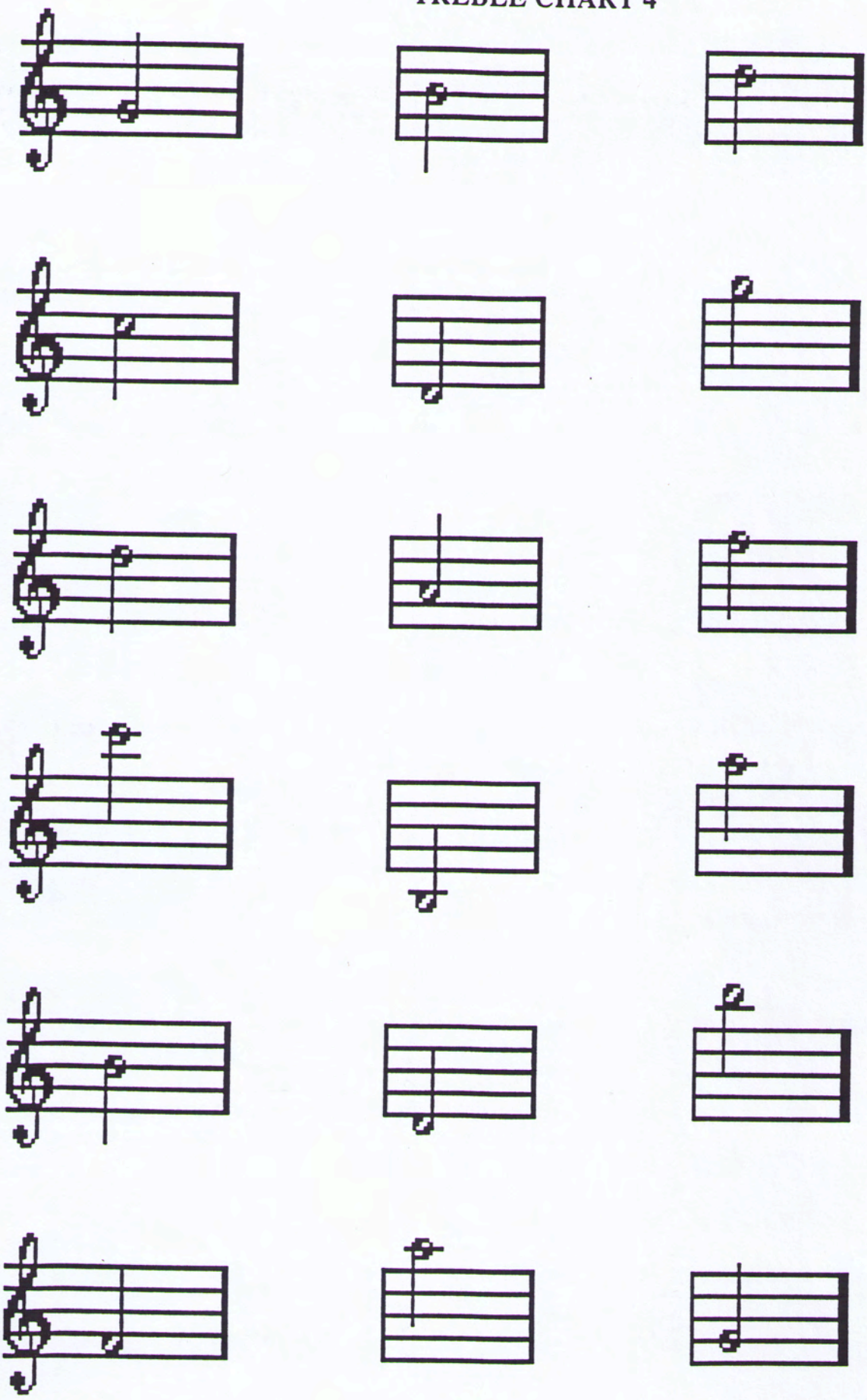
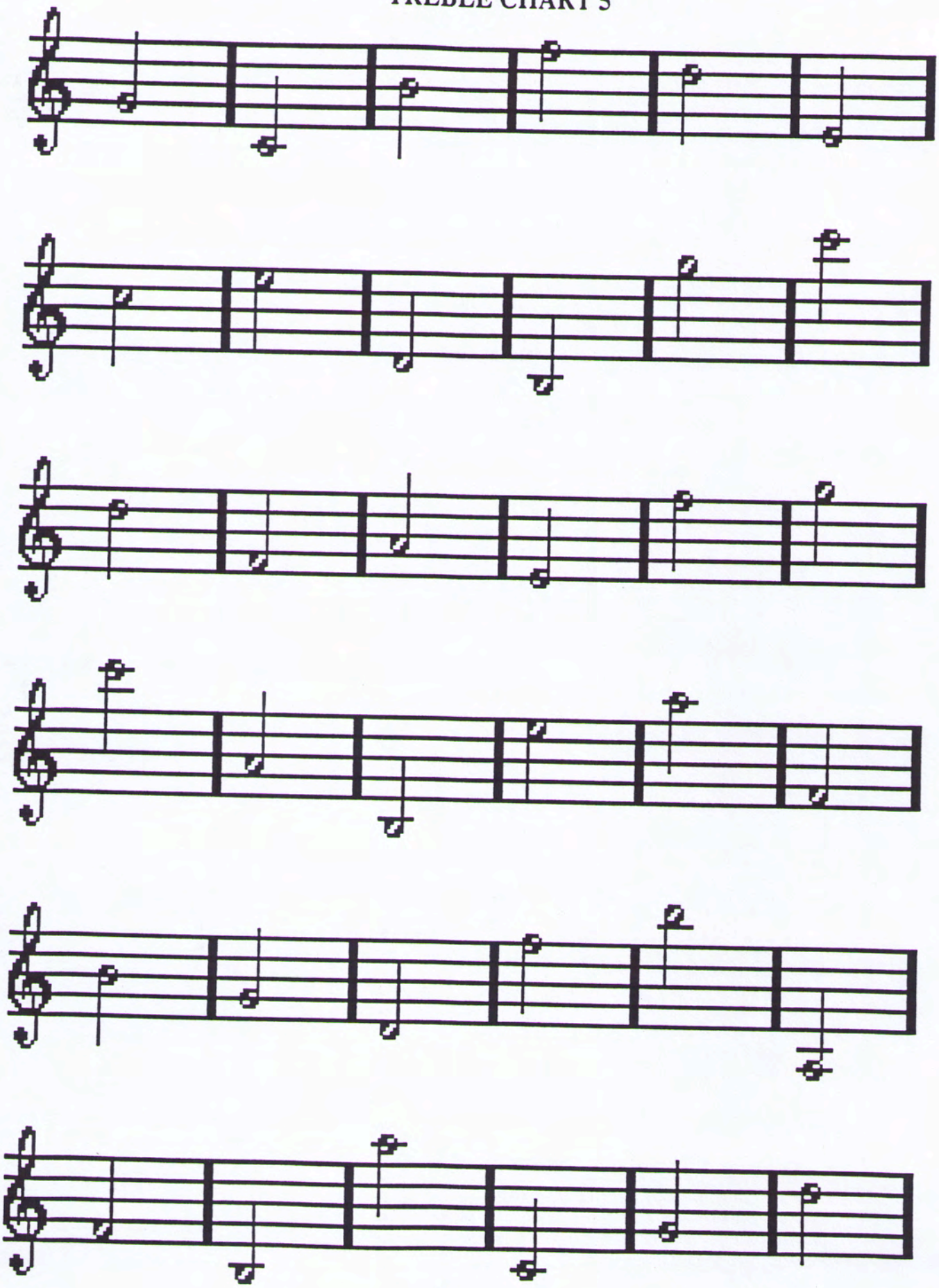
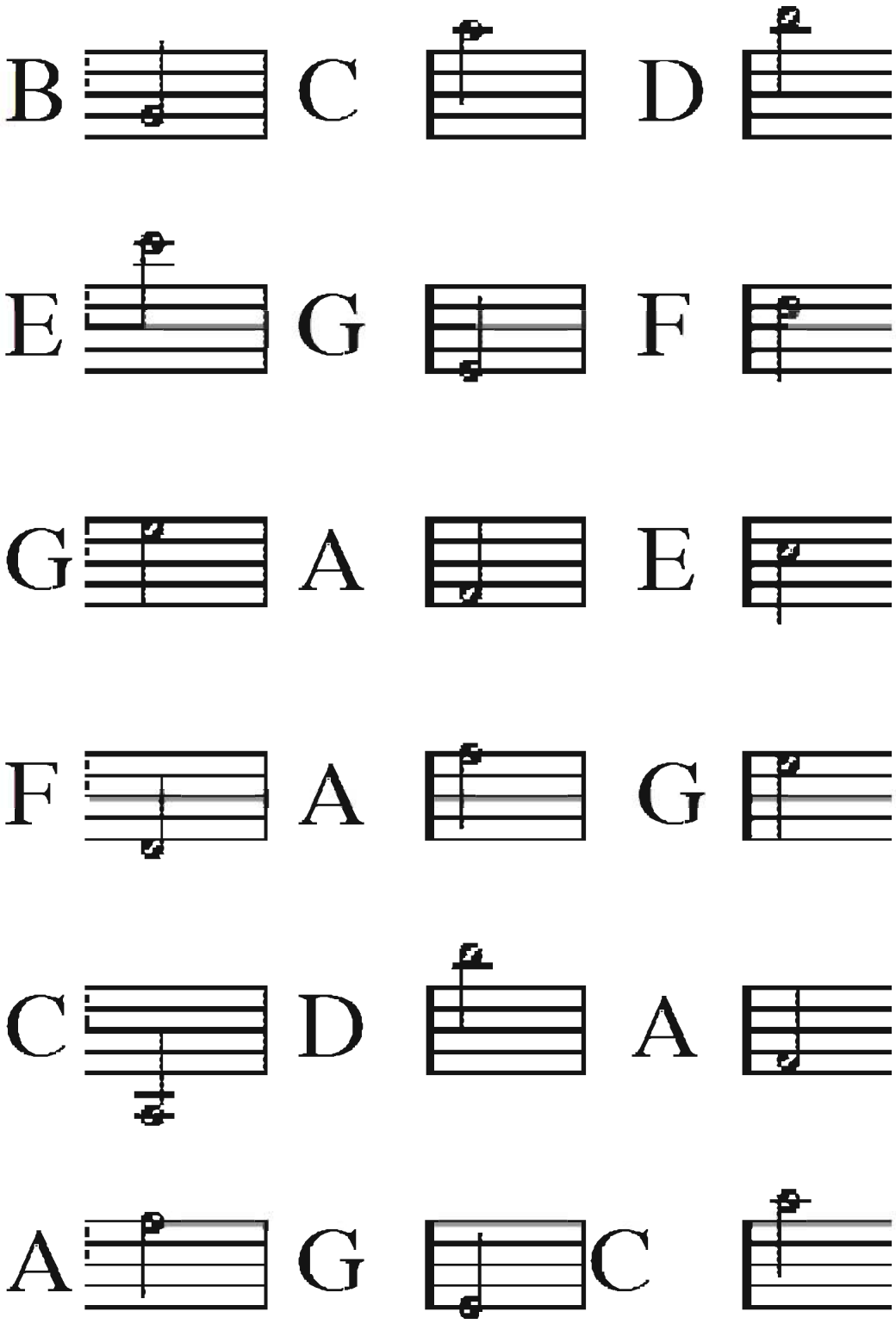


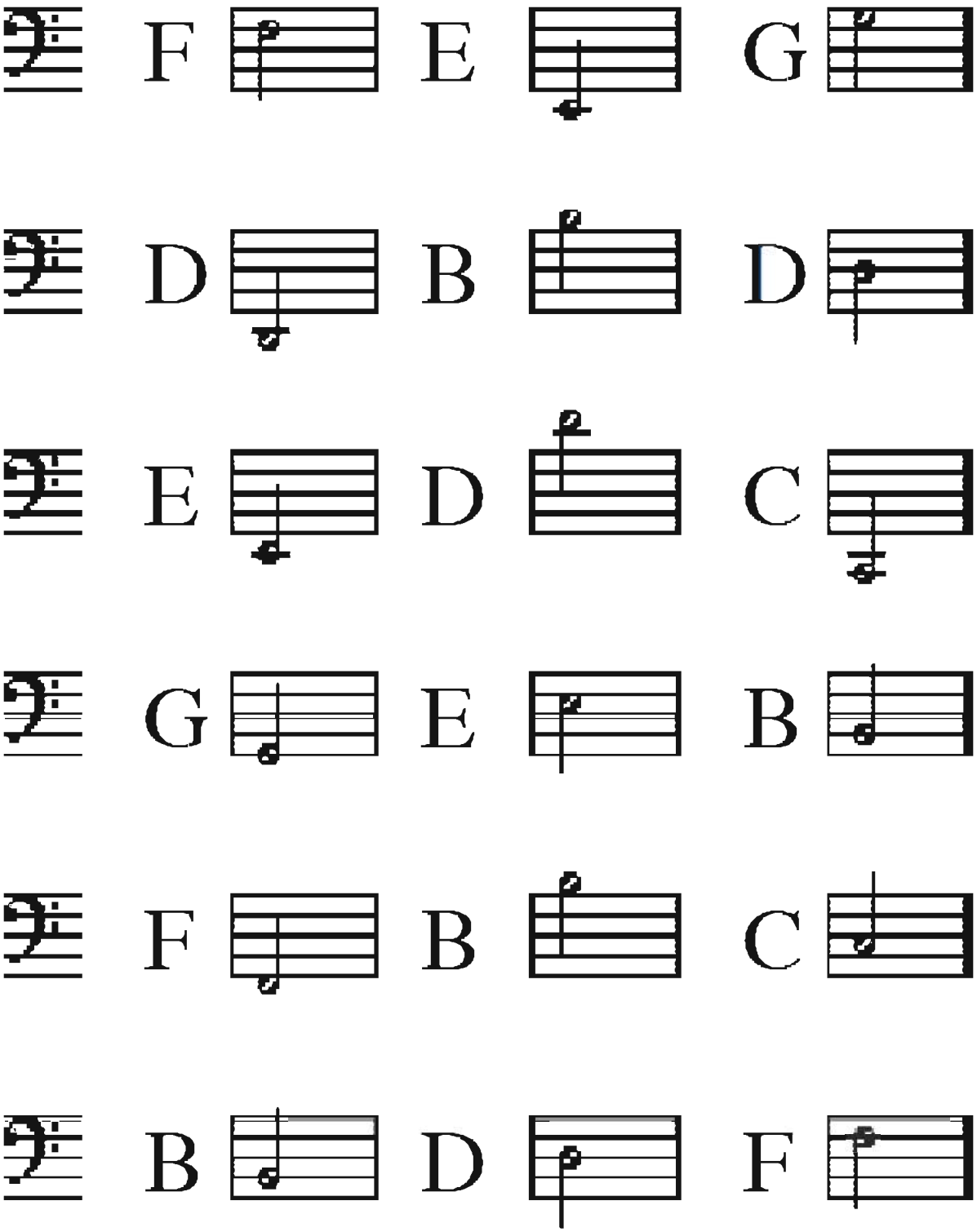
TREBLE CHART 5



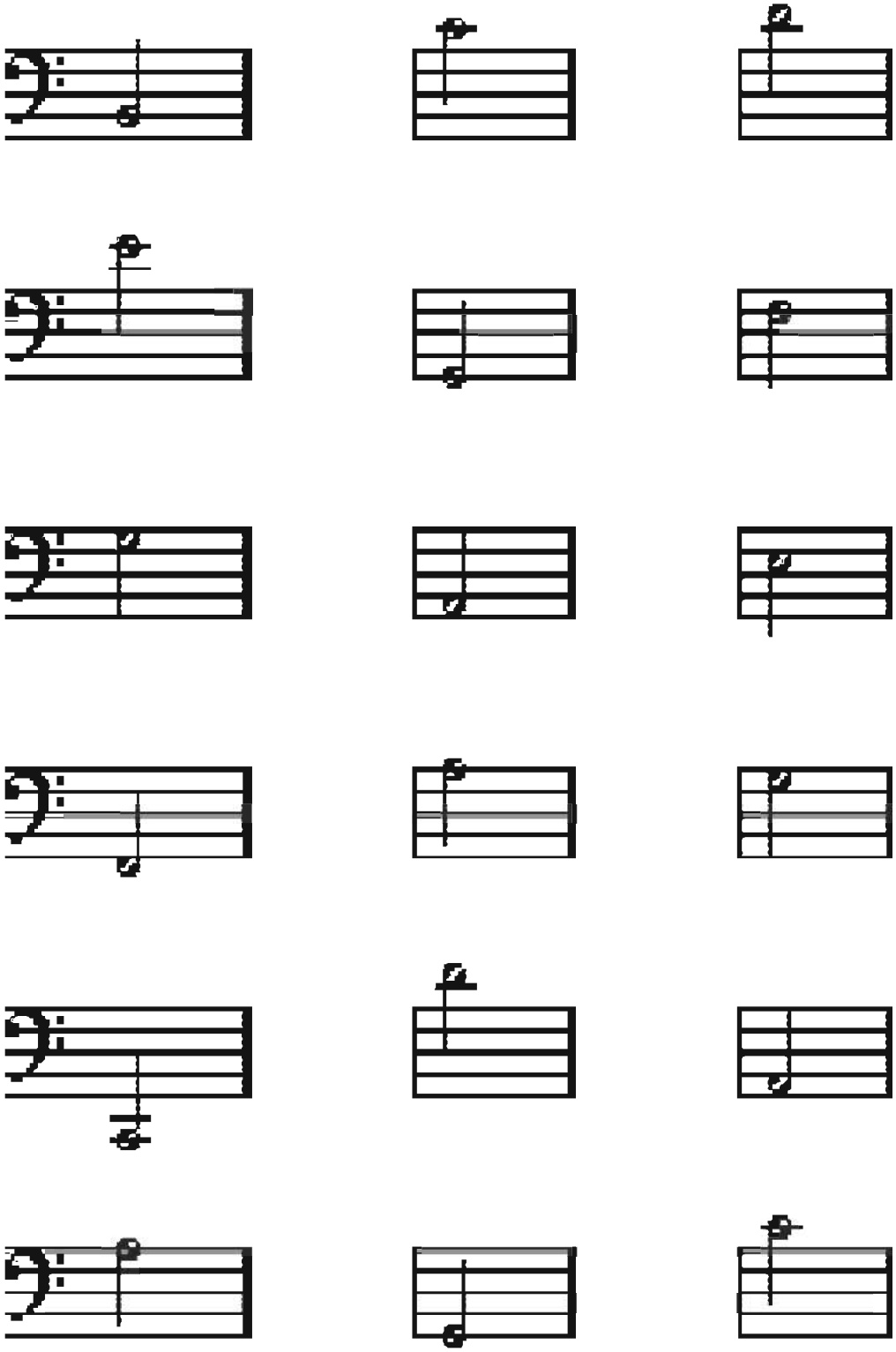
BASS CHART 1



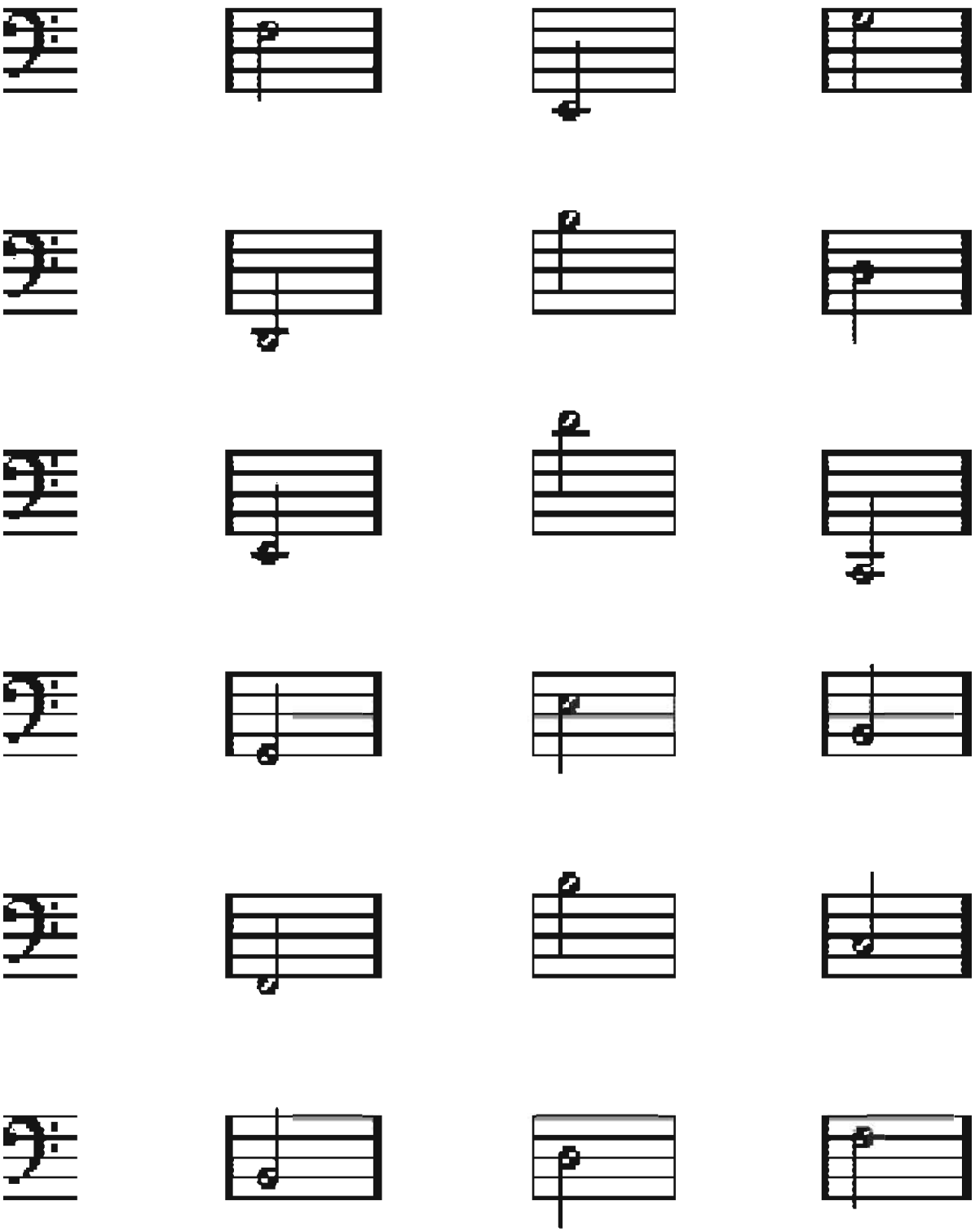
BASS CHART 2



BASS CHART 3



BASS CHART 4



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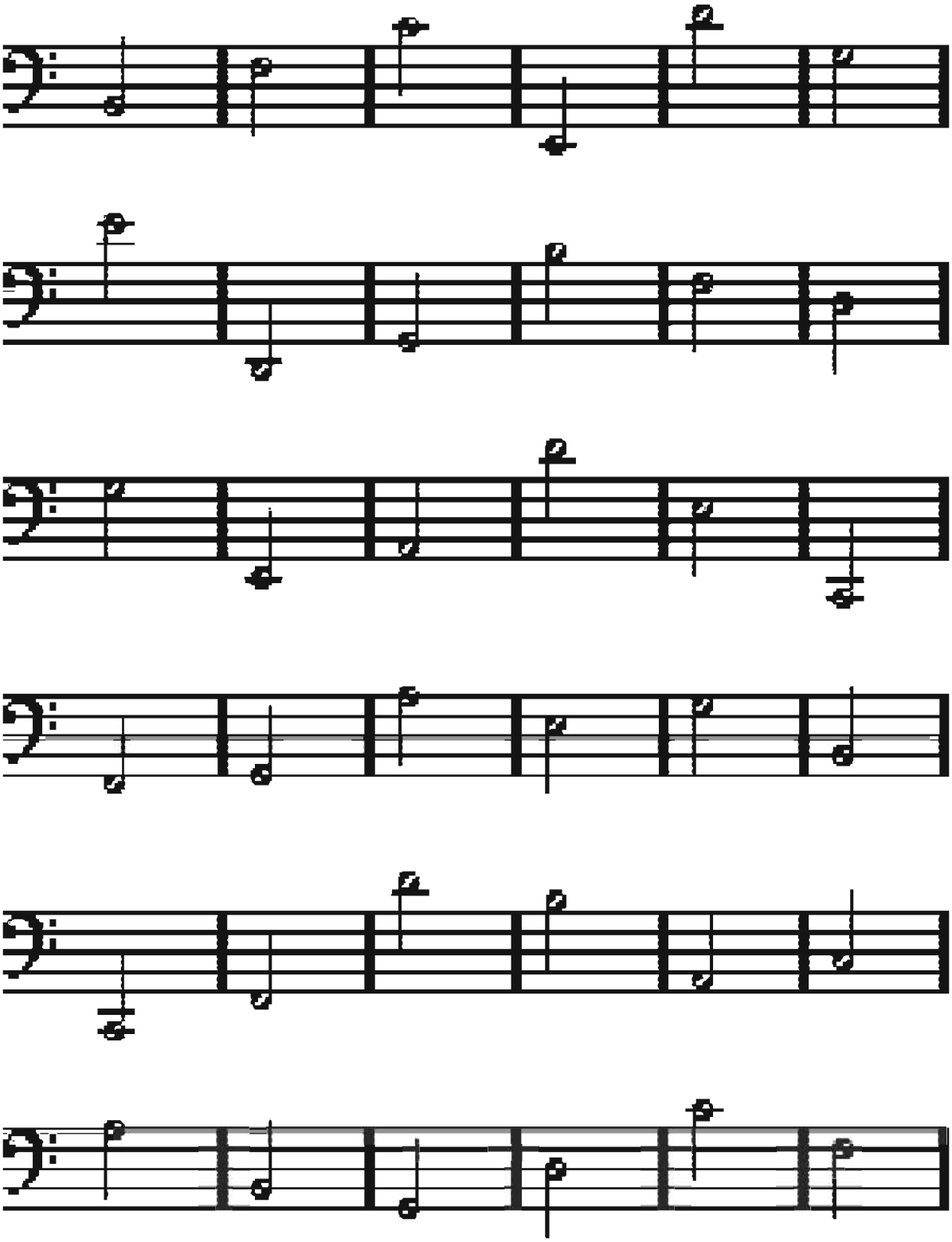
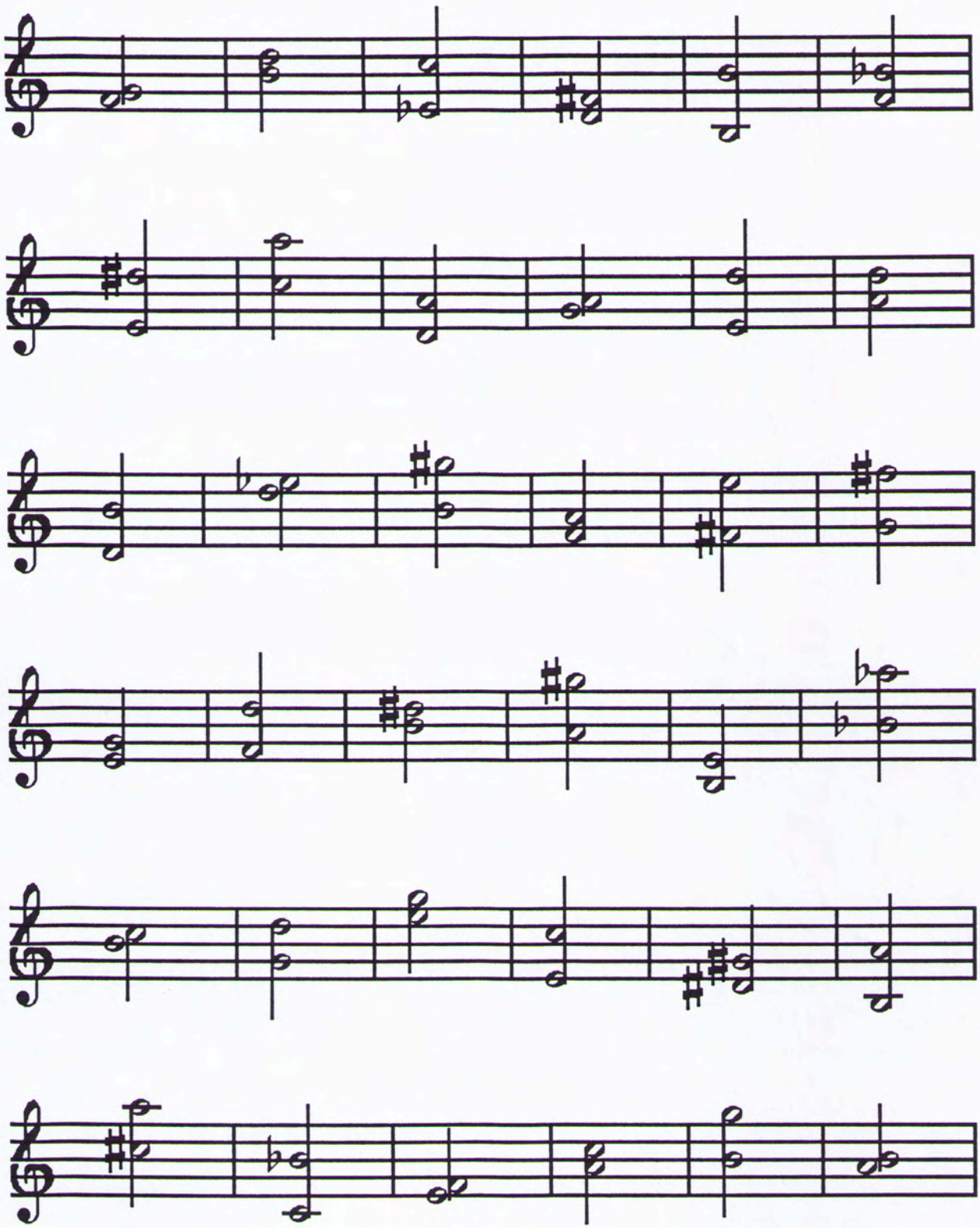
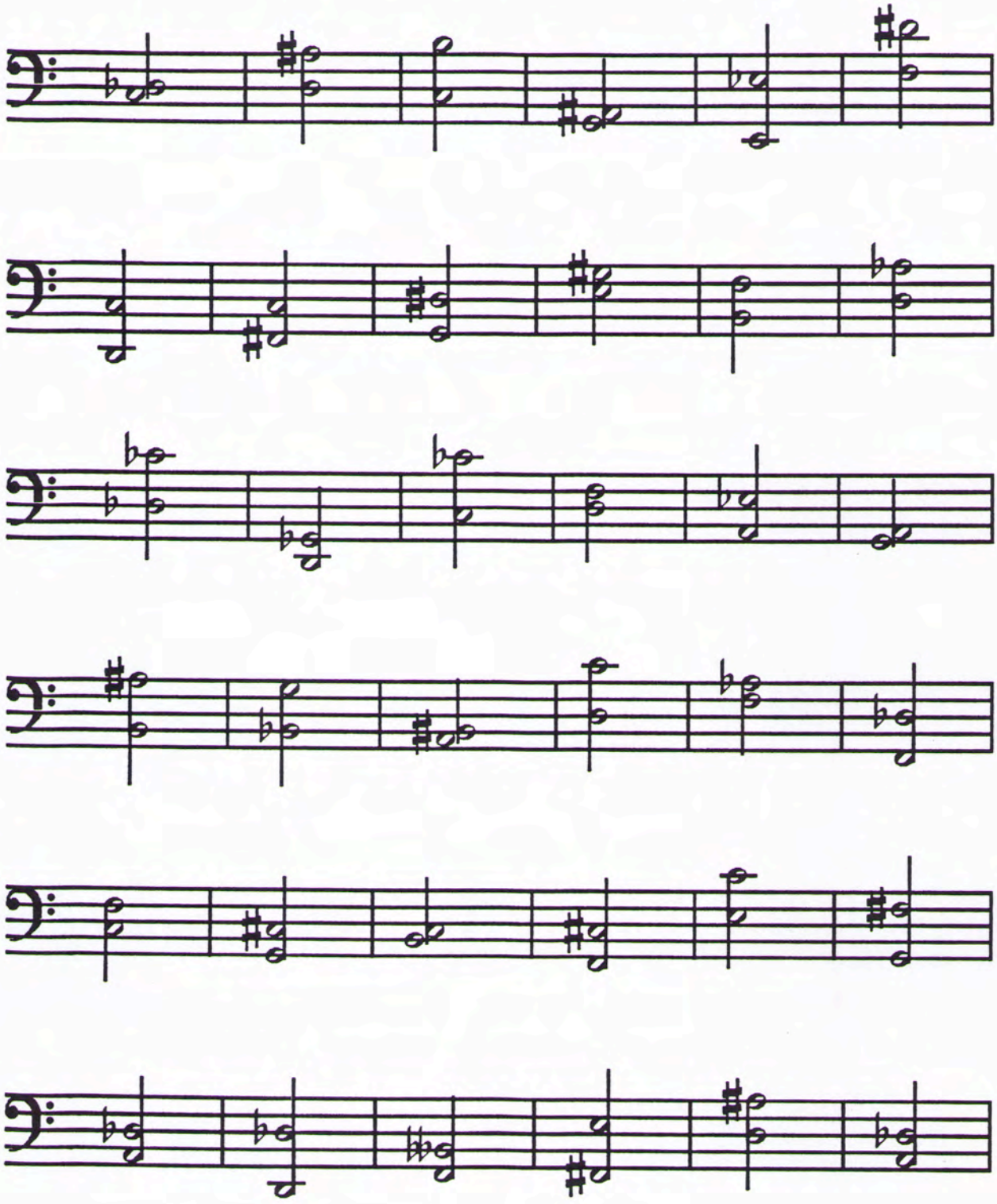


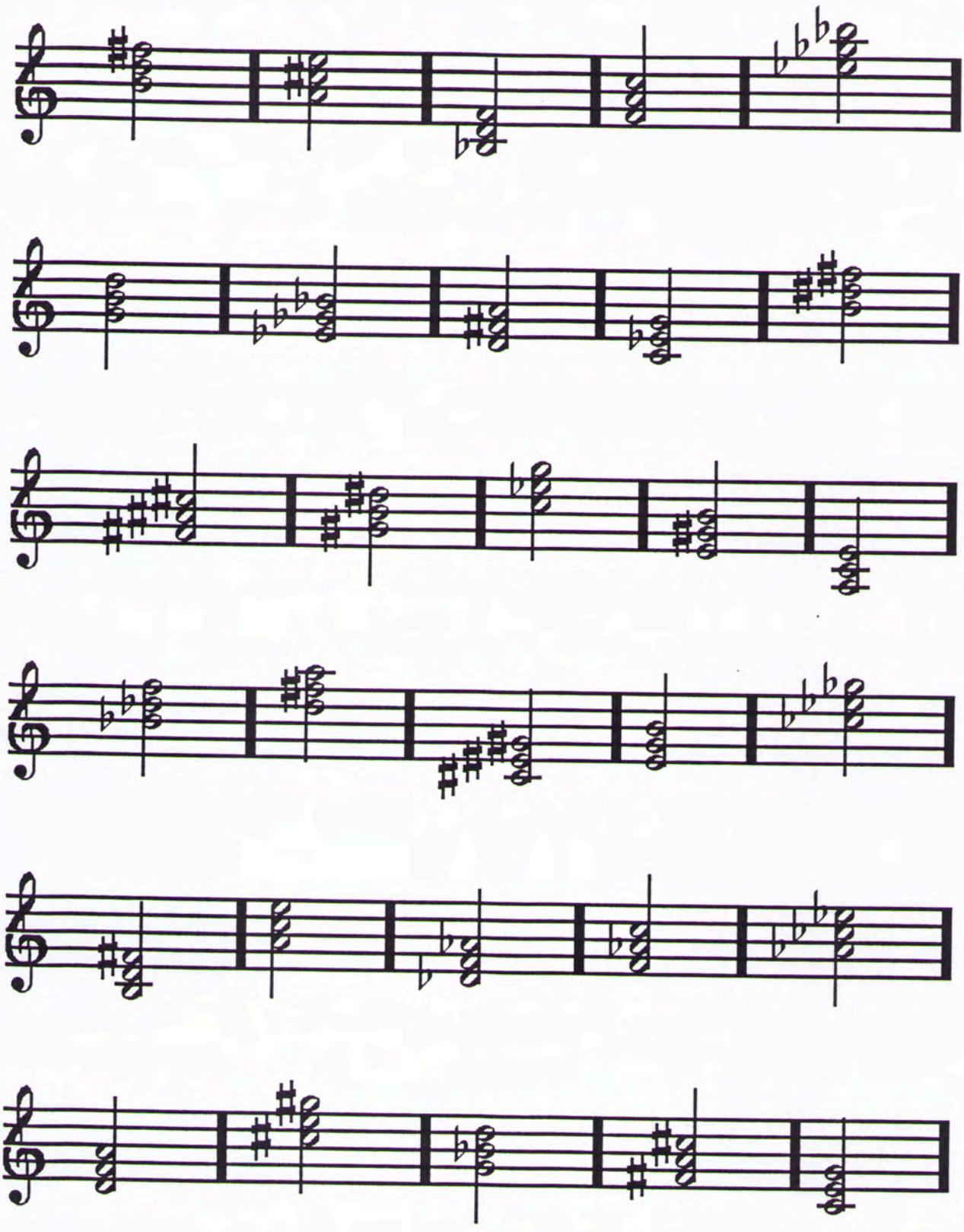
INTERVAL CHART I



INTERVAL CHART II



TREBLE MAJOR/MINOR TRIAD CHART



BASS MAJOR/MINOR TRIAD CHART