

ADD AND SUBTRACT TO 20 PROGRESS MONITORING

One skill, start to finish: the IEP goal, six ten-problem probe forms, and a graph scaled to the probe. Every problem crosses ten. Untimed. Fillable PDF.

ADD & SUBTRACT TO 20 Addition and Subtraction Within 20 – Goal and Directions

Goal, baseline, directions and benchmarks for one skill. Untimed; score is problems correct out of 10.

Five additions with two addends between 2 and 9 and five subtractions with minuends from 11 to 20, mixed at random. Every problem crosses ten: the sum goes above it, the difference drops below it.

Sample goal — Invented; edit every bracket to fit the student
By [personal review date], when given 10 mixed addition and subtraction problems within 20, [Student] will write correct answers to 8 of 10 problems on 3 consecutive weekly probes, as measured by teacher-scored mixed operation probes.

BY (DATE) _____ CRITERION (SCORE OUT OF 10, OR PERCENT) _____
ON ____ OF ____ CONSECUTIVE PROBES

GIVEN (CONDITION; WHAT IS SHOWN, ANY ALLOWED SUPPORT) _____ AS MEASURED BY (THIS PROBE: ADD & SUBTRACT TO 20; FORMS A-F; PAGE 5-10)

STUDENT WILL (THE BEHAVIOR, IN THE WORDS OF THE PROBE) _____

Baseline: give Forms A, B and C on three days and take the middle score

BASILINE PROBE 1	BASILINE PROBE 2	BASILINE PROBE 3	MEDIAN (THE BASILINE)

Benchmarks toward the goal

BENCHMARK	TARGET DATE	TARGET SCORE	ACTUAL SCORE	MEET

Giving and scoring the probe

- ☐ Say: "Some of these are adding and some are taking away. Look at the sign each time."
- ☐ Count sign errors separately on the log: a student who adds everything has an attention-to-sign problem, not a facts problem.
- ☐ Correct the right answer under the line. Problems, not digits, unless the goal says otherwise.
- ☐ Untimed. I will be able to finish with ten.

ADD & SUBTRACT TO 20 Addition and Subtraction Within 20 – Form A

Add or subtract. Look at the sign. Write the answer under the line. Untimed.

NAME _____ DATE _____ FORM _____
A untimed - 10 items

IEP GOAL THIS PROBE MEASURES
Sample: By [personal review date], when given 10 mixed addition and subtraction problems within 20, [Student] will write correct answers to 8 of 10 problems on 3 consecutive weekly probes, as measured by teacher-scored mixed operation probes.
GOAL AS WRITTEN FOR THIS STUDENT (TYPE IT ONCE, THEN PRINT THE FORM)

15 - 10	9 + 4	6 + 8	11 - 6	11 - 5
13 - 10	8 + 9	9 + 7	14 - 6	5 + 7

ADD & SUBTRACT TO 20 Addition and Subtraction Within 20 – Data Log and Graph

One row per probe. Three points in a row under the aim line is a decision, not a feeling; change the teaching and write what changed in the notes.

STUDENT _____ CRITERION / AIM _____ GOAL DATE _____

CORRECT OUT OF 10 - DRAW THE AIM LINE FROM THE BASELINE TO THE CRITERION FIRST, THEN PLOT EACH WEEK

WEEK	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Probe (week)

W	DATE	FORM	CORRECT	ERRORS	SCORE USED ON GRAPH	NOTES (CONDITIONS, WHAT WAS RETEACHING)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

ADD & SUBTRACT TO 20 Addition and Subtraction Within 20 – Caseload Summary

Every student on this goal, on one grid. Twelve rows, eight probes, one decision column.

TEACHER / CASE MANAGER _____ SKILL (AS THE GOAL WORDS IT) _____ MARKING PERIOD _____

STUDENT	BASILINE	CRITERION	P1	P2	P3	P4	P5	P6	P7	P8	TREND	DECISION THIS MONTH

How to fill it

- ☐ One row per student who has a goal on this skill.
- ☐ Baseline is the median of the first three probes.
- ☐ One column per weekly probe; write the score out of 10, not a percent, so the rows compare.
- ☐ Trend up, flat or down over the last four probes.

What it is for

Grouping: When six students sit on the same goal, the individual graphs answer "how is this child doing" and nothing answers "who needs the same fifteen minutes." Rows that are flat together are a group; a row that is flat alone is a different question.

EXAMPLE A Filled-In Data Log (Invented Student)

Jonah is invented. Twelve weekly probes on mixed addition and subtraction within 20, the aim line, the change that three low points forced, and the criterion being met.

The goal, as written for Jonah, second grade (invented)
By May 20, when given 10 mixed addition and subtraction problems within 20, Jonah will write correct answers to 8 of 10 problems on 3 consecutive weekly probes, as measured by teacher-scored mixed operation probes (Forms A-F).

#	DATE	FORM	CORRECT	ERRORS	GRAPHED	NOTES
1	5/8	A	4	6	4	baseline
2	5/9	B	4	6	4	baseline
3	5/10	C	6	4	6	baseline (median of 4, 4, 6 = 4)
4	5/17	D	5	5	5	all 5 additions right; 0 of 5 subtractions
5	5/24	E	5	5	5	same split
6	10/1	F	4	6	4	3 under aim line; taught subtraction by making ten
7	10/8	A	6	4	6	2 of 5 subtractions right
8	10/15	B	7	3	7	...
9	10/22	C	7	3	7	misses are subtractions crossing ten
10	10/29	D	8	2	8	...
11	11/5	E	8	2	8	criterion met, 1 of 3
12	11/12	F	9	1	9	criterion met, 2 of 3

How to read the log

- ☐ Baseline was the median of three forms on three days: 4, 4, 6, so 4. Not the average, not the best.
- ☐ The aim line runs from 4 in week 1 to 8 at the goal date. Probes 4, 5 and 6 (5, 5, 4) sat under it: three in a row, so the teaching changed and the change is written on the row.
- ☐ Because every form is five adds and five subtractions, the errors split cleanly: 5 of 5 additions right and 0 of 5 subtractions is a different week of teaching from a flat 5 of 10.
- ☐ Criterion met on probes 11 and 12; one more consecutive probe at 8 or better and the goal is met.

PROGRESS MONITORING How This Pack Works

Goal, baseline, weekly probe, graph, decision. Six steps, one skill.

A progress monitoring goal needs a thing to count and a page to count it on. This file is both, for one skill; a goal written in the probe's own words, 6 equivalent forms of the probe that measures it, and a graph scaled to it. Nothing has to be built or found.

- Baseline:** Give Forms A, B and C on three different days. The middle score of the three is the baseline; write it on the goal page.
- Write the goal:** from the six-part frame on the goal page. Start from the sample and change every bracket: the date, the condition, the criterion, the number of probes.
- Probe once a week:** with the forms in rotation (A, B, C, D, E, F, A...). Never the same form two weeks running. Every form is ten items, untimed.
- Log and plot the score the same day:** Draw the aim line first from the baseline on the left to the criterion at the goal date on the right, then plot each week's dot.
- Decide from the graph:** Three dots in a row under the aim line: change the teaching this week and write the change on the log. Three in a row over it: raise the target.
- Report from the log:** The log gives the progress report its numbers: baseline, the last two scores, and whether the misses are the additions or the subtractions.

The weekly routine, about five minutes

- ☐ Monday: pull the next form in the rotation (A, B, C, D, E, F, A...).
- ☐ Any day: give the probe one-to-one, untimed; ten items takes a few minutes.
- ☐ Same day: score it, log the row, plot the point, look at the last three points.
- ☐ Friday: if three points sit under the aim line, write the change you are making on the log.

Print and prep

- ☐ Print one copy per student per week: the student writes the answers on the form and that same sheet is the one you score.
- ☐ The teacher copy is the one you mark on; the student copy stays clean.
- ☐ Keep the goal page and the graph page for each student at the front of the data folder; type into them or write on them.
- ☐ The caseload page is one grid for every student on this goal; print it once a month.

What this probe is not
It is not a norm-referenced test and it carries no benchmark score. The sample goal uses invented

Equivalent forms, and why it matters
Every form has ten problems drawn the same way, vertical, with no problem repeated within a form.

Goal, baseline, weekly probe, graph, decision. Six steps, one skill.

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- 1 **Baseline.** Give Forms A, B and C on three different days. The middle score of the three is the baseline; write it on the goal page.
- 2 **Write the goal** from the six-part frame on the goal page. Start from the sample and change every bracket: the date, the condition, the criterion, the number of probes.
- 3 **Probe once a week** with the forms in rotation (A, B, C, D, E, F, A...). Never the same form two weeks running. Every form is ten items, untimed.
- 4 **Log and plot** the score the same day. Draw the aim line first, from the baseline on the left to the criterion at the goal date on the right, then plot each week's dot.
- 5 **Decide from the graph.** Three dots in a row under the aim line: change the teaching this week and write the change on the log. Three in a row over it: raise the target.
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What this probe is not

It is not a norm-referenced test and it carries no benchmark score. The sample goal uses invented criteria in brackets; your team sets the real ones from the baseline and the student's IEP. Every form is untimed and ten items long, so a score of 8 means the same thing on every form, and a student is never scored on speed.

Equivalent forms, and why it matters

Every form has ten problems drawn the same way, vertical, with no problem repeated within a form. Forms are drawn independently, so a fact can recur across the set — which is what a fact probe should do: the facts are the fixed set being learned. A score on one form means the same as a score on another, so the line on the graph is the student, not the paper. Rotate the forms and the page cannot be memorized.

Addition and Subtraction Within 20 — Goal and Directions

Goal, baseline, directions and benchmarks for one skill. Untimed; score is problems correct out of 10.

Five additions with two addends between 2 and 9 and five subtractions with minuends from 11 to 20, mixed at random. Every problem crosses ten: the sum goes above it, the difference drops below it.

Sample goal — invented; edit every bracket to fit the student

By [annual review date], when given 10 mixed addition and subtraction problems within 20, [Student] will write correct answers to [8 of 10] problems on [3] consecutive weekly probes, as measured by teacher-scored mixed operation probes.

BY (DATE)

CRITERION (SCORE OUT OF 10, OR PERCENT)

GIVEN (CONDITION: WHAT IS SHOWN, ANY ALLOWED SUPPORT)

ON ____ OF ____ CONSECUTIVE PROBES

STUDENT WILL (THE BEHAVIOR, IN THE WORDS OF THE PROBE)

AS MEASURED BY (THIS PROBE: ADD & SUBTRACT TO 20, FORMS A–F, PAGE 5–10)

Baseline: give Forms A, B and C on three days and take the middle score

BASELINE PROBE 1	BASELINE PROBE 2	BASELINE PROBE 3	MEDIAN (THE BASELINE)

Benchmarks toward the goal

BENCHMARK	TARGET DATE	TARGET SCORE	ACTUAL SCORE	MET?

Giving and scoring the probe

- ☐ Say: "Some of these are adding and some are taking away. Look at the sign each time."
- ☐ Count sign errors separately on the log; a student who adds everything has an attention-to-sign problem, not a facts problem.
- ☐ Correct: the right answer under the line. Problems, not digits, unless the goal says otherwise.
- ☐ Untimed. Let the student finish all ten.

Scoring rules for this student (accepted answers, reversals, supports allowed)

.....

.....

.....

What the errors say to reteach (carry over from the log)

.....

.....

.....

Add or subtract. Look at the sign. Write the answer under the line. · Untimed.

NAME

DATE

FORM

A untimed · 10 items

IEP GOAL THIS PROBE MEASURES

Sample: By [annual review date], when given 10 mixed addition and subtraction problems within 20, [Student] will write correct answers to [8 of 10] problems on [3] consecutive weekly probes, as measured by teacher-scored mixed operation probes.

GOAL AS WRITTEN FOR THIS STUDENT (TYPE IT ONCE, THEN PRINT THE FORM)

$$\begin{array}{r} 15 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ - 5 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ - 10 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ + 9 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 7 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ + 7 \\ \hline \end{array}$$

TEACHER COPY: MARK EACH ITEM ✓ OR X, THEN TOTAL

1

2

3

4

5

6

7

8

9

10

Problems correct. Self-corrections count as correct. Write the score on the data log the same day.

Correct _____ / 10

Add or subtract. Look at the sign. Write the answer under the line. · Untimed.

NAME

DATE

FORM

B untimed · 10 items

IEP GOAL THIS PROBE MEASURES

Sample: By [annual review date], when given 10 mixed addition and subtraction problems within 20, [Student] will write correct answers to [8 of 10] problems on [3] consecutive weekly probes, as measured by teacher-scored mixed operation probes.

GOAL AS WRITTEN FOR THIS STUDENT (TYPE IT ONCE, THEN PRINT THE FORM)

$$\begin{array}{r} 5 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ -10 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +6 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ -2 \\ \hline \end{array}$$

TEACHER COPY: MARK EACH ITEM ✓ OR X, THEN TOTAL

1

2

3

4

5

6

7

8

9

10

Problems correct. Self-corrections count as correct. Write the score on the data log the same day.

Correct _____ / 10

Addition and Subtraction Within 20 — Data Log and Graph

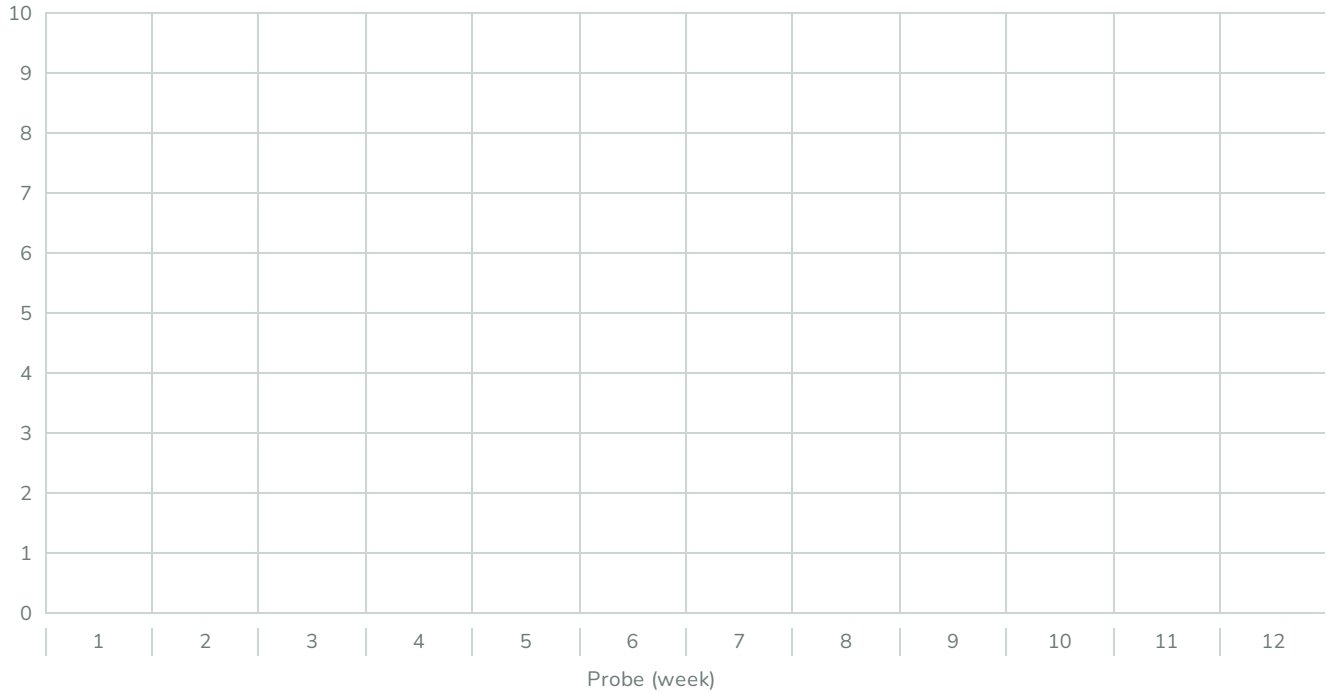
One row per probe. Three points in a row under the aim line is a decision, not a feeling: change the teaching and write what changed in the notes.

STUDENT

CRITERION / AIM

GOAL DATE

CORRECT OUT OF 10 · DRAW THE AIM LINE FROM THE BASELINE TO THE CRITERION FIRST, THEN PLOT EACH WEEK



#	DATE	FORM	CORRECT	ERRORS	SCORE USED ON GRAPH	NOTES (CONDITIONS, WHAT WAS RETEACHING)

Addition and Subtraction Within 20 — Caseload Summary

Every student on this goal, on one grid. Twelve rows, eight probes, one decision column.

TEACHER / CASE MANAGER

SKILL (AS THE GOAL WORDS IT)

MARKING PERIOD

STUDENT	BASELINE	CRITERION	P1	P2	P3	P4	P5	P6	P7	P8	TREND	DECISION THIS MONTH

How to fill it

- ☐ One row per student who has a goal on this skill. Baseline is the median of the first three probes.
- ☐ One column per weekly probe; write the score out of 10, not a percent, so the rows compare.
- ☐ Trend: up, flat or down over the last four probes. That word, not the last score, is what the decision follows.
- ☐ Decision: keep going, change the teaching, or raise the target. A blank decision on a flat row is the thing this page exists to catch.

What it is for

Grouping. When six students sit on the same goal, the individual graphs answer “how is this child doing” and nothing answers “who needs the same fifteen minutes.” Rows that are flat together are a group; a row that is flat alone is a different question. Take this page to the data meeting instead of ten folders.

EXAMPLE

A Filled-In Data Log (Invented Student)

Jonah is invented. Twelve weekly probes on mixed addition and subtraction within 20, the aim line, the change that three low points forced, and the criterion being met.

The goal, as written for Jonah, second grade (invented)

By May 20, when given 10 mixed addition and subtraction problems within 20, Jonah will write correct answers to 8 of 10 problems on 3 consecutive weekly probes, as measured by teacher-scored mixed operation probes (forms A–F).

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8	10/15	B	7	3	7	–
9	10/22	C	7	3	7	misses are subtractions crossing ten
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How to read the log

- ☐ Baseline was the median of three forms on three days: 4, 4, 6, so 4. Not the average, not the best.
- ☐ The aim line runs from 4 in week 1 to 8 at the goal date. Probes 4, 5 and 6 (5, 5, 4) sat under it: three in a row, so the teaching changed and the change is written on the row.
- ☐ Because every form is five adds and five subtracts, the errors split cleanly: 5 of 5 additions right and 0 of 5 subtractions is a different week of teaching from a flat 5 of 10.
- ☐ Criterion met on probes 11 and 12; one more consecutive probe at 8 or better and the goal is met.

The progress report sentence this log produces

“On weekly mixed operation probes (5 addition and 5 subtraction problems within 20, vertical, untimed), Jonah wrote correct answers to 4 of 10 at baseline in September and 8 and 9 of 10 on the two most recent probes in November. The remaining errors are subtractions that cross ten. Progress is sufficient to meet the goal of 8 of 10 on three consecutive probes by May.” Every number in it is on the log above; nothing is from memory.