

JPMethod

Signed Arithmetic

Addition & Subtraction (with Negatives)

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Signed Arithmetic - Addition & Subtraction (with Negatives) Instructions

This workbook helps students become confident in signed number arithmetic, especially when crossing zero. Start simple and work through each section.

- Solve problems slowly and accurately.
- Notice how signs change results.
- Double-check any answers that involve zero.
- Build fluency through consistent repetition.
- Use a number line if needed.
- Try estimating before solving to improve intuition.

Understanding signed arithmetic is essential for progress in math. Keep practicing and enjoy the improvement!

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Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $4 - 4 =$

(7) $2 - 2 =$

(2) $10 - 7 =$

(8) $10 - 5 =$

(3) $1 - 2 =$

(9) $8 - 9 =$

(4) $9 - 4 =$

(10) $7 - 2 =$

(5) $7 - 6 =$

(11) $10 - 4 =$

(6) $3 - 4 =$

(12) $5 - 2 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $5 - 4 =$

(7) $4 - 2 =$

(2) $9 - 3 =$

(8) $6 - 2 =$

(3) $5 - 7 =$

(9) $10 - 10 =$

(4) $2 - 4 =$

(10) $7 - 4 =$

(5) $10 - 9 =$

(11) $6 - 7 =$

(6) $10 - 4 =$

(12) $2 - 1 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $4 - 4 =$

(7) $9 - 11 =$

(2) $9 - 8 =$

(8) $3 - 4 =$

(3) $7 - 3 =$

(9) $4 - 1 =$

(4) $8 - 4 =$

(10) $6 - 1 =$

(5) $1 - 3 =$

(11) $10 - 8 =$

(6) $8 - 5 =$

(12) $3 - 2 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $6 - 7 =$

(7) $7 - 7 =$

(2) $2 - 4 =$

(8) $9 - 5 =$

(3) $3 - 5 =$

(9) $6 - 2 =$

(4) $10 - 7 =$

(10) $7 - 3 =$

(5) $6 - 4 =$

(11) $10 - 6 =$

(6) $9 - 8 =$

(12) $1 - 2 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $10 - 4 =$

(7) $9 - 5 =$

(2) $10 - 2 =$

(8) $4 - 6 =$

(3) $10 - 10 =$

(9) $9 - 5 =$

(4) $5 - 4 =$

(10) $3 - 5 =$

(5) $4 - 5 =$

(11) $5 - 5 =$

(6) $8 - 6 =$

(12) $6 - 4 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $8 - 4 =$

(7) $5 - 1 =$

(2) $8 - 6 =$

(8) $6 - 7 =$

(3) $4 - 4 =$

(9) $9 - 5 =$

(4) $5 - 6 =$

(10) $6 - 7 =$

(5) $9 - 6 =$

(11) $9 - 3 =$

(6) $1 - 2 =$

(12) $7 - 9 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $5 - 5 =$

(7) $4 - 3 =$

(2) $8 - 8 =$

(8) $8 - 10 =$

(3) $5 - 4 =$

(9) $9 - 8 =$

(4) $3 - 1 =$

(10) $8 - 8 =$

(5) $8 - 7 =$

(11) $9 - 8 =$

(6) $7 - 8 =$

(12) $5 - 4 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $9 - 8 =$

(7) $7 - 3 =$

(2) $1 - 2 =$

(8) $5 - 6 =$

(3) $5 - 1 =$

(9) $6 - 4 =$

(4) $5 - 3 =$

(10) $10 - 12 =$

(5) $9 - 1 =$

(11) $1 - 3 =$

(6) $10 - 9 =$

(12) $5 - 3 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $6 - 6 =$

(7) $10 - 7 =$

(2) $3 - 3 =$

(8) $8 - 4 =$

(3) $4 - 2 =$

(9) $7 - 8 =$

(4) $7 - 6 =$

(10) $7 - 6 =$

(5) $7 - 1 =$

(11) $3 - 1 =$

(6) $7 - 7 =$

(12) $7 - 6 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $9 - 11 =$

(7) $6 - 5 =$

(2) $8 - 7 =$

(8) $9 - 1 =$

(3) $10 - 10 =$

(9) $2 - 4 =$

(4) $6 - 1 =$

(10) $8 - 9 =$

(5) $6 - 3 =$

(11) $5 - 5 =$

(6) $4 - 6 =$

(12) $4 - 2 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $6 - 2 =$

(7) $10 - 5 =$

(2) $4 - 4 =$

(8) $8 - 8 =$

(3) $5 - 4 =$

(9) $3 - 1 =$

(4) $3 - 5 =$

(10) $8 - 2 =$

(5) $9 - 3 =$

(11) $7 - 8 =$

(6) $1 - 1 =$

(12) $10 - 11 =$

Section 1. Subtraction: Positive or Slightly Negative Results

Solve each problem and write the answer in the box.

(1) $8 - 6 =$

(7) $10 - 4 =$

(2) $7 - 5 =$

(8) $3 - 5 =$

(3) $8 - 1 =$

(9) $10 - 1 =$

(4) $6 - 4 =$

(10) $10 - 11 =$

(5) $4 - 4 =$

(11) $6 - 2 =$

(6) $10 - 3 =$

(12) $8 - 2 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-13 + 3 =$

(7) $-11 + 14 =$

(2) $-14 + 4 =$

(8) $-11 + 10 =$

(3) $-7 + 13 =$

(9) $-6 + 12 =$

(4) $-6 + 10 =$

(10) $-3 + 4 =$

(5) $-3 + 9 =$

(11) $-11 + 11 =$

(6) $-8 + 15 =$

(12) $-13 + 4 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-6 + 12 =$

(7) $-14 + 4 =$

(2) $-8 + 2 =$

(8) $-3 + 11 =$

(3) $-4 + 5 =$

(9) $-6 + 1 =$

(4) $-11 + 9 =$

(10) $-8 + 9 =$

(5) $-1 + 7 =$

(11) $-1 + 5 =$

(6) $-6 + 5 =$

(12) $-6 + 7 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-14 + 8 =$

(7) $-8 + 2 =$

(2) $-9 + 6 =$

(8) $-11 + 6 =$

(3) $-5 + 2 =$

(9) $-3 + 7 =$

(4) $-10 + 7 =$

(10) $-5 + 14 =$

(5) $-11 + 11 =$

(11) $-9 + 1 =$

(6) $-2 + 13 =$

(12) $-7 + 6 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-7 + 2 =$

(7) $-14 + 11 =$

(2) $-15 + 7 =$

(8) $-1 + 5 =$

(3) $-4 + 10 =$

(9) $-9 + 2 =$

(4) $-11 + 1 =$

(10) $-5 + 3 =$

(5) $-11 + 12 =$

(11) $-2 + 3 =$

(6) $-4 + 14 =$

(12) $-15 + 3 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-5 + 8 =$

(7) $-7 + 1 =$

(2) $-12 + 5 =$

(8) $-14 + 4 =$

(3) $-1 + 5 =$

(9) $-8 + 2 =$

(4) $-1 + 12 =$

(10) $-8 + 15 =$

(5) $-14 + 1 =$

(11) $-7 + 12 =$

(6) $-4 + 3 =$

(12) $-9 + 14 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-2 + 4 =$

(7) $-8 + 1 =$

(2) $-6 + 7 =$

(8) $-7 + 10 =$

(3) $-2 + 13 =$

(9) $-2 + 2 =$

(4) $-15 + 6 =$

(10) $-14 + 9 =$

(5) $-4 + 15 =$

(11) $-15 + 12 =$

(6) $-9 + 11 =$

(12) $-9 + 14 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-14 + 8 =$

(7) $-6 + 2 =$

(2) $-10 + 10 =$

(8) $-5 + 11 =$

(3) $-5 + 2 =$

(9) $-12 + 12 =$

(4) $-2 + 11 =$

(10) $-9 + 2 =$

(5) $-10 + 11 =$

(11) $-8 + 3 =$

(6) $-2 + 9 =$

(12) $-1 + 1 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $- 8 + 4 =$

(7) $- 2 + 1 =$

(2) $- 7 + 3 =$

(8) $- 4 + 5 =$

(3) $- 12 + 15 =$

(9) $- 2 + 3 =$

(4) $- 2 + 2 =$

(10) $- 7 + 8 =$

(5) $- 3 + 13 =$

(11) $- 10 + 9 =$

(6) $- 10 + 15 =$

(12) $- 8 + 15 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-10 + 13 =$

(7) $-6 + 11 =$

(2) $-11 + 6 =$

(8) $-8 + 15 =$

(3) $-9 + 3 =$

(9) $-12 + 8 =$

(4) $-7 + 7 =$

(10) $-8 + 5 =$

(5) $-13 + 3 =$

(11) $-1 + 13 =$

(6) $-6 + 14 =$

(12) $-1 + 5 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-6 + 13 =$

(7) $-4 + 3 =$

(2) $-12 + 11 =$

(8) $-1 + 5 =$

(3) $-6 + 5 =$

(9) $-4 + 7 =$

(4) $-5 + 2 =$

(10) $-12 + 3 =$

(5) $-11 + 13 =$

(11) $-7 + 9 =$

(6) $-15 + 10 =$

(12) $-2 + 3 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-1 + 14 =$

(7) $-14 + 13 =$

(2) $-3 + 5 =$

(8) $-15 + 5 =$

(3) $-3 + 2 =$

(9) $-8 + 6 =$

(4) $-14 + 3 =$

(10) $-6 + 7 =$

(5) $-2 + 11 =$

(11) $-14 + 11 =$

(6) $-2 + 13 =$

(12) $-8 + 1 =$

Section 2. Addition: Negative First Number, Any Result

Solve each problem and write the answer in the box.

(1) $-14 + 8 =$

(7) $-6 + 6 =$

(2) $-6 + 5 =$

(8) $-2 + 11 =$

(3) $-4 + 5 =$

(9) $-11 + 1 =$

(4) $-2 + 5 =$

(10) $-1 + 10 =$

(5) $-9 + 14 =$

(11) $-2 + 15 =$

(6) $-14 + 4 =$

(12) $-3 + 13 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $4 - 2 =$

(7) $7 - 3 =$

(2) $5 - 7 =$

(8) $2 - 8 =$

(3) $3 - 1 =$

(9) $5 - 1 =$

(4) $5 - 8 =$

(10) $4 - 8 =$

(5) $2 - 4 =$

(11) $4 - 6 =$

(6) $7 - 8 =$

(12) $6 - 6 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $2 - 8 =$

(7) $3 - 2 =$

(2) $6 - 2 =$

(8) $5 - 6 =$

(3) $4 - 1 =$

(9) $5 - 8 =$

(4) $8 - 1 =$

(10) $7 - 8 =$

(5) $8 - 7 =$

(11) $7 - 6 =$

(6) $2 - 2 =$

(12) $7 - 7 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $6 - 7 =$

(7) $7 - 6 =$

(2) $5 - 6 =$

(8) $1 - 5 =$

(3) $8 - 2 =$

(9) $6 - 2 =$

(4) $2 - 2 =$

(10) $3 - 8 =$

(5) $2 - 6 =$

(11) $2 - 5 =$

(6) $1 - 6 =$

(12) $7 - 1 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $7 - 5 =$

(7) $3 - 1 =$

(2) $2 - 8 =$

(8) $3 - 3 =$

(3) $4 - 1 =$

(9) $3 - 2 =$

(4) $6 - 4 =$

(10) $4 - 6 =$

(5) $4 - 2 =$

(11) $3 - 5 =$

(6) $4 - 4 =$

(12) $3 - 7 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $1 - 3 =$

(7) $8 - 7 =$

(2) $5 - 6 =$

(8) $4 - 2 =$

(3) $7 - 2 =$

(9) $8 - 5 =$

(4) $1 - 2 =$

(10) $4 - 7 =$

(5) $7 - 7 =$

(11) $1 - 4 =$

(6) $6 - 3 =$

(12) $4 - 3 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $4 - 6 =$

(7) $8 - 8 =$

(2) $3 - 4 =$

(8) $5 - 1 =$

(3) $3 - 5 =$

(9) $2 - 5 =$

(4) $3 - 3 =$

(10) $8 - 1 =$

(5) $3 - 8 =$

(11) $6 - 5 =$

(6) $8 - 6 =$

(12) $2 - 7 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $1 - 8 =$

(7) $7 - 6 =$

(2) $6 - 8 =$

(8) $2 - 7 =$

(3) $6 - 2 =$

(9) $5 - 3 =$

(4) $1 - 4 =$

(10) $2 - 3 =$

(5) $8 - 3 =$

(11) $5 - 7 =$

(6) $6 - 5 =$

(12) $2 - 5 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $5 - 6 =$

(7) $7 - 5 =$

(2) $1 - 8 =$

(8) $3 - 8 =$

(3) $3 - 3 =$

(9) $2 - 7 =$

(4) $4 - 6 =$

(10) $4 - 7 =$

(5) $7 - 1 =$

(11) $6 - 4 =$

(6) $6 - 7 =$

(12) $3 - 2 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $6 - 3 =$

(7) $2 - 1 =$

(2) $7 - 6 =$

(8) $3 - 7 =$

(3) $6 - 5 =$

(9) $3 - 3 =$

(4) $4 - 6 =$

(10) $8 - 1 =$

(5) $4 - 4 =$

(11) $6 - 4 =$

(6) $3 - 2 =$

(12) $5 - 8 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $4 - 1 =$

(7) $3 - 7 =$

(2) $2 - 6 =$

(8) $5 - 4 =$

(3) $3 - 1 =$

(9) $2 - 1 =$

(4) $8 - 3 =$

(10) $7 - 8 =$

(5) $8 - 1 =$

(11) $2 - 8 =$

(6) $1 - 5 =$

(12) $4 - 3 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $7 - 1 =$

(7) $3 - 8 =$

(2) $4 - 7 =$

(8) $3 - 3 =$

(3) $2 - 6 =$

(9) $8 - 1 =$

(4) $1 - 7 =$

(10) $4 - 1 =$

(5) $5 - 1 =$

(11) $7 - 8 =$

(6) $1 - 6 =$

(12) $1 - 4 =$

Section 3. Simple Subtraction (Mixed Results)

Solve each problem and write the answer in the box.

(1) $4 - 5 =$

(7) $2 - 5 =$

(2) $4 - 6 =$

(8) $3 - 7 =$

(3) $8 - 5 =$

(9) $4 - 8 =$

(4) $7 - 3 =$

(10) $1 - 7 =$

(5) $3 - 5 =$

(11) $7 - 6 =$

(6) $8 - 6 =$

(12) $7 - 2 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $10 - 5 =$

(7) $11 - 6 =$

(2) $9 - 6 =$

(8) $14 - 7 =$

(3) $11 - 11 =$

(9) $10 - 6 =$

(4) $11 - 10 =$

(10) $10 - 15 =$

(5) $12 - 12 =$

(11) $9 - 12 =$

(6) $13 - 9 =$

(12) $7 - 12 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $10 - 15 =$

(7) $6 - 12 =$

(2) $8 - 6 =$

(8) $12 - 6 =$

(3) $7 - 12 =$

(9) $15 - 10 =$

(4) $13 - 6 =$

(10) $13 - 13 =$

(5) $9 - 12 =$

(11) $9 - 7 =$

(6) $14 - 9 =$

(12) $10 - 13 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $6 - 8 =$

(7) $13 - 11 =$

(2) $8 - 12 =$

(8) $10 - 15 =$

(3) $10 - 13 =$

(9) $12 - 12 =$

(4) $12 - 13 =$

(10) $7 - 13 =$

(5) $14 - 6 =$

(11) $7 - 11 =$

(6) $9 - 11 =$

(12) $6 - 13 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $12 - 5 =$

(7) $8 - 15 =$

(2) $14 - 11 =$

(8) $10 - 11 =$

(3) $15 - 5 =$

(9) $14 - 7 =$

(4) $15 - 15 =$

(10) $10 - 10 =$

(5) $10 - 13 =$

(11) $6 - 14 =$

(6) $5 - 7 =$

(12) $13 - 10 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $9 - 7 =$

(7) $13 - 15 =$

(2) $10 - 8 =$

(8) $14 - 14 =$

(3) $13 - 9 =$

(9) $14 - 5 =$

(4) $9 - 8 =$

(10) $6 - 5 =$

(5) $7 - 15 =$

(11) $15 - 8 =$

(6) $14 - 13 =$

(12) $14 - 15 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $8 - 7 =$

(7) $6 - 11 =$

(2) $5 - 9 =$

(8) $8 - 8 =$

(3) $14 - 11 =$

(9) $5 - 5 =$

(4) $7 - 10 =$

(10) $12 - 14 =$

(5) $13 - 12 =$

(11) $9 - 13 =$

(6) $9 - 12 =$

(12) $9 - 10 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $10 - 5 =$

(7) $10 - 10 =$

(2) $5 - 14 =$

(8) $7 - 8 =$

(3) $10 - 13 =$

(9) $13 - 5 =$

(4) $6 - 11 =$

(10) $5 - 7 =$

(5) $13 - 9 =$

(11) $12 - 13 =$

(6) $7 - 6 =$

(12) $7 - 14 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $12 - 15 =$

(7) $8 - 10 =$

(2) $15 - 9 =$

(8) $10 - 10 =$

(3) $8 - 15 =$

(9) $11 - 7 =$

(4) $9 - 12 =$

(10) $13 - 13 =$

(5) $5 - 7 =$

(11) $10 - 8 =$

(6) $11 - 12 =$

(12) $6 - 9 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $10 - 14 =$

(7) $14 - 12 =$

(2) $7 - 11 =$

(8) $15 - 14 =$

(3) $14 - 10 =$

(9) $5 - 14 =$

(4) $14 - 9 =$

(10) $7 - 13 =$

(5) $5 - 10 =$

(11) $7 - 15 =$

(6) $15 - 6 =$

(12) $8 - 5 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $11 - 10 =$

(7) $6 - 14 =$

(2) $9 - 5 =$

(8) $8 - 5 =$

(3) $6 - 10 =$

(9) $15 - 8 =$

(4) $15 - 9 =$

(10) $6 - 11 =$

(5) $8 - 8 =$

(11) $12 - 6 =$

(6) $13 - 9 =$

(12) $5 - 13 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $11 - 15 =$

(7) $11 - 7 =$

(2) $12 - 15 =$

(8) $11 - 12 =$

(3) $9 - 10 =$

(9) $9 - 5 =$

(4) $15 - 5 =$

(10) $9 - 14 =$

(5) $15 - 14 =$

(11) $10 - 9 =$

(6) $13 - 5 =$

(12) $15 - 13 =$

Section 4. Subtraction up to 20 (Mixed Results)

Solve each problem and write the answer in the box.

(1) $10 - 11 =$

(7) $7 - 12 =$

(2) $11 - 8 =$

(8) $14 - 12 =$

(3) $13 - 14 =$

(9) $8 - 9 =$

(4) $5 - 7 =$

(10) $8 - 12 =$

(5) $13 - 10 =$

(11) $12 - 10 =$

(6) $13 - 11 =$

(12) $9 - 6 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $3 - 9 =$

(7) $7 - 9 =$

(2) $5 - 4 =$

(8) $2 - 7 =$

(3) $6 + 3 =$

(9) $3 + 3 =$

(4) $5 - 3 =$

(10) $6 - 4 =$

(5) $6 + 5 =$

(11) $5 + 7 =$

(6) $3 + 10 =$

(12) $8 + 5 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $10 + 9 =$

(7) $10 - 1 =$

(2) $3 + 6 =$

(8) $5 - 1 =$

(3) $2 - 4 =$

(9) $10 + 2 =$

(4) $2 - 9 =$

(10) $7 + 6 =$

(5) $1 - 8 =$

(11) $9 + 1 =$

(6) $9 + 7 =$

(12) $8 + 1 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $7 - 3 =$

(7) $4 + 1 =$

(2) $7 + 6 =$

(8) $5 + 8 =$

(3) $8 - 7 =$

(9) $9 - 7 =$

(4) $2 - 9 =$

(10) $4 + 8 =$

(5) $6 + 2 =$

(11) $3 - 5 =$

(6) $9 + 7 =$

(12) $2 + 1 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $5 - 10 =$

(7) $3 - 8 =$

(2) $5 + 6 =$

(8) $7 - 9 =$

(3) $1 + 2 =$

(9) $9 - 4 =$

(4) $5 - 3 =$

(10) $10 + 2 =$

(5) $9 - 5 =$

(11) $9 - 6 =$

(6) $4 + 3 =$

(12) $9 + 9 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $10 - 1 =$

(7) $4 - 10 =$

(2) $4 + 2 =$

(8) $10 - 10 =$

(3) $10 + 1 =$

(9) $4 - 5 =$

(4) $1 + 7 =$

(10) $9 + 4 =$

(5) $4 - 9 =$

(11) $5 - 5 =$

(6) $1 + 3 =$

(12) $9 + 10 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $5 + 7 =$

(7) $7 + 4 =$

(2) $2 + 4 =$

(8) $5 - 7 =$

(3) $8 + 4 =$

(9) $9 - 6 =$

(4) $5 - 1 =$

(10) $5 - 6 =$

(5) $4 + 2 =$

(11) $8 - 2 =$

(6) $4 - 10 =$

(12) $6 - 4 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $6 - 7 =$

(7) $9 - 6 =$

(2) $10 + 4 =$

(8) $8 - 8 =$

(3) $1 + 5 =$

(9) $3 - 6 =$

(4) $5 - 3 =$

(10) $3 + 9 =$

(5) $6 + 4 =$

(11) $3 - 9 =$

(6) $10 - 4 =$

(12) $9 + 1 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $7 + 9 =$

(7) $9 + 7 =$

(2) $1 - 6 =$

(8) $9 - 9 =$

(3) $9 - 6 =$

(9) $7 + 4 =$

(4) $7 - 3 =$

(10) $4 - 6 =$

(5) $4 - 4 =$

(11) $8 + 6 =$

(6) $3 - 8 =$

(12) $9 + 4 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $1 + 1 =$

(7) $9 + 9 =$

(2) $3 - 4 =$

(8) $1 - 1 =$

(3) $3 + 1 =$

(9) $9 - 5 =$

(4) $9 + 8 =$

(10) $9 + 7 =$

(5) $1 - 10 =$

(11) $2 + 2 =$

(6) $8 - 1 =$

(12) $4 + 4 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $5 + 9 =$

(7) $7 - 3 =$

(2) $3 + 6 =$

(8) $9 + 6 =$

(3) $4 + 10 =$

(9) $2 + 7 =$

(4) $7 + 2 =$

(10) $2 + 6 =$

(5) $3 - 10 =$

(11) $6 - 1 =$

(6) $10 + 7 =$

(12) $8 - 8 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $6 + 9 =$

(7) $6 - 2 =$

(2) $7 - 3 =$

(8) $1 + 5 =$

(3) $2 - 10 =$

(9) $6 - 5 =$

(4) $4 - 2 =$

(10) $3 + 2 =$

(5) $5 + 3 =$

(11) $7 + 8 =$

(6) $3 - 7 =$

(12) $2 - 1 =$

Section 5. Mixed Positive Addition & Subtraction

Solve each problem and write the answer in the box.

(1) $6 - 5 =$

(7) $1 - 1 =$

(2) $2 - 6 =$

(8) $2 + 8 =$

(3) $8 - 10 =$

(9) $6 - 10 =$

(4) $4 + 5 =$

(10) $9 + 1 =$

(5) $1 + 2 =$

(11) $4 + 10 =$

(6) $7 - 7 =$

(12) $5 - 1 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $6 - 7 =$

(7) $7 - 13 =$

(2) $10 - 6 =$

(8) $5 - 11 =$

(3) $7 - 15 =$

(9) $8 - 13 =$

(4) $7 - 9 =$

(10) $3 - 9 =$

(5) $9 - 1 =$

(11) $7 - 11 =$

(6) $10 - 7 =$

(12) $2 - 10 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $7 - 10 =$

(7) $4 - 11 =$

(2) $10 - 12 =$

(8) $7 - 3 =$

(3) $9 - 15 =$

(9) $2 - 8 =$

(4) $4 - 8 =$

(10) $10 - 9 =$

(5) $2 - 2 =$

(11) $9 - 6 =$

(6) $8 - 13 =$

(12) $2 - 3 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $6 - 13 =$

(7) $8 - 3 =$

(2) $10 - 5 =$

(8) $6 - 15 =$

(3) $6 - 3 =$

(9) $2 - 11 =$

(4) $2 - 15 =$

(10) $2 - 14 =$

(5) $5 - 12 =$

(11) $6 - 11 =$

(6) $8 - 10 =$

(12) $9 - 8 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $4 - 4 =$

(7) $7 - 2 =$

(2) $10 - 6 =$

(8) $5 - 10 =$

(3) $8 - 14 =$

(9) $8 - 10 =$

(4) $5 - 15 =$

(10) $7 - 10 =$

(5) $6 - 2 =$

(11) $8 - 6 =$

(6) $6 - 8 =$

(12) $6 - 9 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $8 - 14 =$

(7) $9 - 13 =$

(2) $8 - 10 =$

(8) $9 - 9 =$

(3) $5 - 15 =$

(9) $4 - 3 =$

(4) $1 - 2 =$

(10) $3 - 13 =$

(5) $2 - 5 =$

(11) $7 - 15 =$

(6) $4 - 7 =$

(12) $8 - 6 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $10 - 13 =$

(7) $10 - 15 =$

(2) $7 - 13 =$

(8) $1 - 8 =$

(3) $9 - 4 =$

(9) $4 - 2 =$

(4) $9 - 13 =$

(10) $9 - 7 =$

(5) $5 - 13 =$

(11) $7 - 5 =$

(6) $6 - 2 =$

(12) $7 - 4 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $8 - 13 =$

(7) $9 - 7 =$

(2) $10 - 15 =$

(8) $10 - 14 =$

(3) $5 - 15 =$

(9) $9 - 2 =$

(4) $4 - 7 =$

(10) $8 - 7 =$

(5) $3 - 3 =$

(11) $7 - 14 =$

(6) $10 - 4 =$

(12) $5 - 2 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $7 - 15 =$

(7) $10 - 9 =$

(2) $4 - 11 =$

(8) $6 - 2 =$

(3) $10 - 14 =$

(9) $10 - 13 =$

(4) $6 - 10 =$

(10) $10 - 6 =$

(5) $8 - 14 =$

(11) $3 - 10 =$

(6) $8 - 7 =$

(12) $9 - 9 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $8 - 11 =$

(7) $1 - 6 =$

(2) $2 - 8 =$

(8) $9 - 11 =$

(3) $4 - 12 =$

(9) $6 - 4 =$

(4) $10 - 5 =$

(10) $5 - 6 =$

(5) $3 - 6 =$

(11) $9 - 1 =$

(6) $4 - 2 =$

(12) $3 - 3 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $7 - 2 =$

(7) $8 - 8 =$

(2) $8 - 11 =$

(8) $7 - 12 =$

(3) $5 - 10 =$

(9) $5 - 13 =$

(4) $10 - 2 =$

(10) $2 - 5 =$

(5) $6 - 1 =$

(11) $5 - 14 =$

(6) $1 - 14 =$

(12) $3 - 15 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $5 - 4 =$

(7) $2 - 2 =$

(2) $7 - 5 =$

(8) $3 - 8 =$

(3) $2 - 15 =$

(9) $4 - 9 =$

(4) $8 - 14 =$

(10) $2 - 14 =$

(5) $10 - 12 =$

(11) $6 - 1 =$

(6) $1 - 15 =$

(12) $3 - 9 =$

Section 6. Negative Second Term (Addition)

Solve each problem and write the answer in the box.

(1) $1 - 11 =$

(7) $2 - 5 =$

(2) $3 - 12 =$

(8) $7 - 7 =$

(3) $6 - 2 =$

(9) $6 - 8 =$

(4) $7 - 8 =$

(10) $6 - 6 =$

(5) $10 - 5 =$

(11) $2 - 4 =$

(6) $7 - 9 =$

(12) $9 - 9 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $- 5 + 11 =$

(7) $- 2 + 4 =$

(2) $- 14 + 9 =$

(8) $- 1 + 2 =$

(3) $- 6 + 11 =$

(9) $- 3 + 2 =$

(4) $- 8 + 6 =$

(10) $- 10 + 7 =$

(5) $- 5 + 12 =$

(11) $- 3 + 3 =$

(6) $- 1 + 7 =$

(12) $- 11 + 11 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-15 + 10 =$

(7) $-14 + 11 =$

(2) $-15 + 5 =$

(8) $-11 + 2 =$

(3) $-15 + 15 =$

(9) $-14 + 9 =$

(4) $-3 + 7 =$

(10) $-3 + 3 =$

(5) $-5 + 12 =$

(11) $-9 + 10 =$

(6) $-9 + 12 =$

(12) $-11 + 12 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-4 + 14 =$

(7) $-4 + 1 =$

(2) $-15 + 4 =$

(8) $-8 + 6 =$

(3) $-1 + 7 =$

(9) $-13 + 6 =$

(4) $-8 + 10 =$

(10) $-4 + 13 =$

(5) $-11 + 11 =$

(11) $-4 + 15 =$

(6) $-14 + 1 =$

(12) $-3 + 15 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-12 + 9 =$

(7) $-12 + 8 =$

(2) $-3 + 12 =$

(8) $-7 + 15 =$

(3) $-2 + 14 =$

(9) $-10 + 15 =$

(4) $-4 + 7 =$

(10) $-13 + 7 =$

(5) $-5 + 1 =$

(11) $-10 + 9 =$

(6) $-8 + 7 =$

(12) $-3 + 8 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-10 + 13 =$

(7) $-3 + 2 =$

(2) $-11 + 9 =$

(8) $-12 + 12 =$

(3) $-11 + 12 =$

(9) $-15 + 14 =$

(4) $-8 + 8 =$

(10) $-12 + 1 =$

(5) $-15 + 8 =$

(11) $-10 + 7 =$

(6) $-10 + 3 =$

(12) $-13 + 15 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-4 + 10 =$

(7) $-5 + 14 =$

(2) $-8 + 6 =$

(8) $-10 + 1 =$

(3) $-3 + 13 =$

(9) $-2 + 12 =$

(4) $-4 + 15 =$

(10) $-14 + 4 =$

(5) $-13 + 1 =$

(11) $-9 + 8 =$

(6) $-15 + 4 =$

(12) $-13 + 12 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-14 + 1 =$

(7) $-14 + 10 =$

(2) $-1 + 14 =$

(8) $-9 + 11 =$

(3) $-4 + 15 =$

(9) $-12 + 5 =$

(4) $-8 + 12 =$

(10) $-2 + 6 =$

(5) $-6 + 2 =$

(11) $-4 + 14 =$

(6) $-5 + 14 =$

(12) $-10 + 8 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-7 + 13 =$

(7) $-13 + 4 =$

(2) $-12 + 6 =$

(8) $-9 + 2 =$

(3) $-9 + 15 =$

(9) $-2 + 5 =$

(4) $-11 + 14 =$

(10) $-10 + 2 =$

(5) $-6 + 6 =$

(11) $-15 + 6 =$

(6) $-7 + 11 =$

(12) $-11 + 10 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-12 + 2 =$

(7) $-11 + 8 =$

(2) $-13 + 13 =$

(8) $-2 + 2 =$

(3) $-13 + 2 =$

(9) $-2 + 12 =$

(4) $-8 + 8 =$

(10) $-12 + 14 =$

(5) $-9 + 2 =$

(11) $-10 + 7 =$

(6) $-3 + 4 =$

(12) $-5 + 5 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-1 + 11 =$

(7) $-8 + 1 =$

(2) $-3 + 3 =$

(8) $-5 + 7 =$

(3) $-1 + 14 =$

(9) $-10 + 4 =$

(4) $-14 + 1 =$

(10) $-11 + 5 =$

(5) $-15 + 3 =$

(11) $-1 + 3 =$

(6) $-2 + 12 =$

(12) $-6 + 10 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-5 + 5 =$

(7) $-9 + 13 =$

(2) $-9 + 15 =$

(8) $-8 + 9 =$

(3) $-15 + 2 =$

(9) $-10 + 15 =$

(4) $-9 + 3 =$

(10) $-9 + 5 =$

(5) $-12 + 11 =$

(11) $-15 + 6 =$

(6) $-5 + 13 =$

(12) $-15 + 15 =$

Section 7. Negative First Term (Addition)

Solve each problem and write the answer in the box.

(1) $-2 + 3 =$

(7) $-2 + 13 =$

(2) $-9 + 14 =$

(8) $-13 + 4 =$

(3) $-7 + 12 =$

(9) $-10 + 11 =$

(4) $-14 + 8 =$

(10) $-6 + 10 =$

(5) $-3 + 13 =$

(11) $-1 + 14 =$

(6) $-14 + 1 =$

(12) $-15 + 2 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-15 - 3 =$

(7) $-10 - 1 =$

(2) $-7 - 10 =$

(8) $-13 - 12 =$

(3) $-13 - 14 =$

(9) $-3 - 4 =$

(4) $-5 - 12 =$

(10) $-1 - 6 =$

(5) $-7 - 2 =$

(11) $-4 - 4 =$

(6) $-3 - 12 =$

(12) $-6 - 6 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-6 - 14 =$

(7) $-12 - 5 =$

(2) $-11 - 10 =$

(8) $-9 - 11 =$

(3) $-13 - 4 =$

(9) $-13 - 13 =$

(4) $-3 - 5 =$

(10) $-4 - 6 =$

(5) $-5 - 10 =$

(11) $-2 - 3 =$

(6) $-4 - 7 =$

(12) $-13 - 6 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-1 - 3 =$

(7) $-2 - 4 =$

(2) $-5 - 6 =$

(8) $-8 - 15 =$

(3) $-1 - 8 =$

(9) $-12 - 12 =$

(4) $-10 - 4 =$

(10) $-10 - 11 =$

(5) $-12 - 10 =$

(11) $-4 - 15 =$

(6) $-13 - 5 =$

(12) $-9 - 8 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-6 - 12 =$

(7) $-3 - 13 =$

(2) $-7 - 11 =$

(8) $-4 - 13 =$

(3) $-8 - 15 =$

(9) $-15 - 15 =$

(4) $-15 - 12 =$

(10) $-6 - 4 =$

(5) $-15 - 7 =$

(11) $-3 - 14 =$

(6) $-15 - 10 =$

(12) $-14 - 10 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-13 - 1 =$

(7) $-11 - 15 =$

(2) $-8 - 1 =$

(8) $-11 - 14 =$

(3) $-10 - 7 =$

(9) $-10 - 13 =$

(4) $-14 - 2 =$

(10) $-13 - 4 =$

(5) $-3 - 2 =$

(11) $-7 - 1 =$

(6) $-13 - 8 =$

(12) $-10 - 6 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-11 - 3 =$

(7) $-8 - 11 =$

(2) $-8 - 8 =$

(8) $-2 - 11 =$

(3) $-14 - 5 =$

(9) $-13 - 3 =$

(4) $-13 - 10 =$

(10) $-3 - 7 =$

(5) $-10 - 13 =$

(11) $-3 - 6 =$

(6) $-15 - 11 =$

(12) $-7 - 15 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-2 - 7 =$

(7) $-14 - 3 =$

(2) $-7 - 5 =$

(8) $-13 - 13 =$

(3) $-6 - 1 =$

(9) $-3 - 12 =$

(4) $-8 - 11 =$

(10) $-15 - 9 =$

(5) $-9 - 1 =$

(11) $-5 - 9 =$

(6) $-7 - 6 =$

(12) $-2 - 5 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-4 - 15 =$

(7) $-12 - 14 =$

(2) $-5 - 13 =$

(8) $-9 - 6 =$

(3) $-13 - 15 =$

(9) $-15 - 9 =$

(4) $-10 - 12 =$

(10) $-11 - 2 =$

(5) $-9 - 4 =$

(11) $-12 - 13 =$

(6) $-5 - 11 =$

(12) $-14 - 8 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-2 - 6 =$

(7) $-13 - 6 =$

(2) $-10 - 1 =$

(8) $-1 - 14 =$

(3) $-14 - 9 =$

(9) $-3 - 11 =$

(4) $-7 - 10 =$

(10) $-1 - 9 =$

(5) $-7 - 8 =$

(11) $-9 - 5 =$

(6) $-3 - 4 =$

(12) $-6 - 6 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $- 11 - 4 =$

(7) $- 14 - 11 =$

(2) $- 6 - 5 =$

(8) $- 13 - 3 =$

(3) $- 12 - 8 =$

(9) $- 13 - 12 =$

(4) $- 1 - 2 =$

(10) $- 15 - 8 =$

(5) $- 4 - 8 =$

(11) $- 1 - 10 =$

(6) $- 2 - 15 =$

(12) $- 11 - 10 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-7 - 9 =$

(7) $-4 - 2 =$

(2) $-5 - 15 =$

(8) $-11 - 15 =$

(3) $-10 - 8 =$

(9) $-15 - 13 =$

(4) $-13 - 2 =$

(10) $-2 - 12 =$

(5) $-6 - 7 =$

(11) $-5 - 12 =$

(6) $-10 - 13 =$

(12) $-5 - 9 =$

Section 8. Both Terms Negative (Addition)

Solve each problem and write the answer in the box.

(1) $-15 - 13 =$

(7) $-10 - 2 =$

(2) $-9 - 13 =$

(8) $-11 - 11 =$

(3) $-15 - 9 =$

(9) $-2 - 4 =$

(4) $-4 - 12 =$

(10) $-2 - 12 =$

(5) $-4 - 8 =$

(11) $-11 - 4 =$

(6) $-1 - 10 =$

(12) $-3 - 2 =$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (+12) + (+9) =$$

$$(7) \quad + (+12) - (-4) =$$

$$(2) \quad + (+0) + (+14) =$$

$$(8) \quad + (-7) - (-9) =$$

$$(3) \quad + (+5) + (-10) =$$

$$(9) \quad + (-6) - (+6) =$$

$$(4) \quad + (-8) + (-7) =$$

$$(10) \quad + (+3) - (-12) =$$

$$(5) \quad + (+7) - (+15) =$$

$$(11) \quad + (+1) + (+6) =$$

$$(6) \quad + (-2) - (+13) =$$

$$(12) \quad + (+2) - (+5) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (- 5) + (+ 8) =$$

$$(7) \quad + (- 11) - (+ 8) =$$

$$(2) \quad + (+ 6) + (+ 2) =$$

$$(8) \quad + (+ 8) - (+ 10) =$$

$$(3) \quad + (+ 14) - (+ 15) =$$

$$(9) \quad + (+ 15) + (+ 6) =$$

$$(4) \quad + (+ 1) - (- 6) =$$

$$(10) \quad + (+ 5) - (- 13) =$$

$$(5) \quad + (+ 11) + (+ 6) =$$

$$(11) \quad + (- 4) + (- 8) =$$

$$(6) \quad + (- 6) + (- 12) =$$

$$(12) \quad + (- 2) - (+ 10) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (- 4) - (- 7) =$$

$$(7) \quad + (- 14) - (+ 12) =$$

$$(2) \quad + (- 1) - (+ 12) =$$

$$(8) \quad + (- 11) + (- 9) =$$

$$(3) \quad + (+ 0) + (- 14) =$$

$$(9) \quad + (- 2) - (+ 3) =$$

$$(4) \quad + (+ 0) + (+ 13) =$$

$$(10) \quad + (- 11) - (- 5) =$$

$$(5) \quad + (+ 1) + (- 12) =$$

$$(11) \quad + (+ 9) + (- 13) =$$

$$(6) \quad + (+ 1) - (- 6) =$$

$$(12) \quad + (- 5) - (+ 5) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (- 6) - (+ 6) =$$

$$(7) \quad + (+ 13) + (- 14) =$$

$$(2) \quad + (+ 0) + (- 13) =$$

$$(8) \quad + (+ 6) - (- 5) =$$

$$(3) \quad + (- 7) - (+ 5) =$$

$$(9) \quad + (+ 8) + (- 15) =$$

$$(4) \quad + (+ 12) - (- 7) =$$

$$(10) \quad + (- 6) - (- 7) =$$

$$(5) \quad + (+ 5) - (+ 7) =$$

$$(11) \quad + (- 3) - (- 3) =$$

$$(6) \quad + (- 9) - (- 11) =$$

$$(12) \quad + (+ 3) + (+ 7) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

(1) $+ (-5) + (+5) =$

(7) $+ (+5) - (-2) =$

(2) $+ (-15) + (-1) =$

(8) $+ (-2) - (+15) =$

(3) $+ (-9) - (+9) =$

(9) $+ (-3) - (-15) =$

(4) $+ (+3) + (+9) =$

(10) $+ (+2) + (-9) =$

(5) $+ (+0) + (+10) =$

(11) $+ (+15) - (-15) =$

(6) $+ (-11) + (+4) =$

(12) $+ (+9) - (+11) =$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (- 15) - (- 8) =$$

$$(7) \quad + (+4) + (- 14) =$$

$$(2) \quad + (+8) + (- 11) =$$

$$(8) \quad + (+5) + (+11) =$$

$$(3) \quad + (+8) + (- 15) =$$

$$(9) \quad + (- 14) + (+7) =$$

$$(4) \quad + (- 12) + (- 4) =$$

$$(10) \quad + (- 2) + (- 1) =$$

$$(5) \quad + (- 3) + (+13) =$$

$$(11) \quad + (- 12) - (+2) =$$

$$(6) \quad + (+9) - (+2) =$$

$$(12) \quad + (+0) - (+7) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (-9) + (+7) =$$

$$(7) \quad + (-6) + (-12) =$$

$$(2) \quad + (-6) + (-2) =$$

$$(8) \quad + (+0) + (-9) =$$

$$(3) \quad + (+6) + (+1) =$$

$$(9) \quad + (+9) + (-7) =$$

$$(4) \quad + (+4) - (+4) =$$

$$(10) \quad + (-4) + (+7) =$$

$$(5) \quad + (-2) + (+11) =$$

$$(11) \quad + (-6) - (-10) =$$

$$(6) \quad + (+1) + (+8) =$$

$$(12) \quad + (+2) + (+0) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

(1) $+ (-15) + (+6) =$

(7) $+ (-6) + (+15) =$

(2) $+ (+5) + (+8) =$

(8) $+ (-1) - (+8) =$

(3) $+ (-8) + (+7) =$

(9) $+ (-2) - (+13) =$

(4) $+ (-6) - (-11) =$

(10) $+ (-5) + (+13) =$

(5) $+ (-3) + (+1) =$

(11) $+ (-4) - (+9) =$

(6) $+ (-10) - (-13) =$

(12) $+ (-10) + (+15) =$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (+7) + (+14) =$$

$$(7) \quad + (+8) + (+8) =$$

$$(2) \quad + (- 5) - (- 8) =$$

$$(8) \quad + (+13) + (- 7) =$$

$$(3) \quad + (- 15) + (+6) =$$

$$(9) \quad + (- 1) + (- 6) =$$

$$(4) \quad + (+14) + (- 12) =$$

$$(10) \quad + (- 1) - (- 14) =$$

$$(5) \quad + (- 11) - (+15) =$$

$$(11) \quad + (+11) + (- 10) =$$

$$(6) \quad + (+9) + (+1) =$$

$$(12) \quad + (+12) + (- 6) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (+7) - (+12) =$$

$$(7) \quad + (- 10) - (+4) =$$

$$(2) \quad + (+10) - (- 2) =$$

$$(8) \quad + (+9) - (- 4) =$$

$$(3) \quad + (- 12) + (- 11) =$$

$$(9) \quad + (+12) + (+6) =$$

$$(4) \quad + (+15) + (+12) =$$

$$(10) \quad + (+0) + (+14) =$$

$$(5) \quad + (- 12) + (- 2) =$$

$$(11) \quad + (- 12) - (+13) =$$

$$(6) \quad + (+10) - (+3) =$$

$$(12) \quad + (- 1) - (- 14) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (- 7) + (+ 5) =$$

$$(7) \quad + (- 11) - (+ 11) =$$

$$(2) \quad + (- 15) - (+ 7) =$$

$$(8) \quad + (- 15) + (+ 5) =$$

$$(3) \quad + (+ 15) + (+ 6) =$$

$$(9) \quad + (+ 1) + (+ 12) =$$

$$(4) \quad + (+ 1) - (+ 1) =$$

$$(10) \quad + (+ 12) - (+ 0) =$$

$$(5) \quad + (- 2) + (+ 6) =$$

$$(11) \quad + (- 13) + (+ 9) =$$

$$(6) \quad + (+ 0) + (- 4) =$$

$$(12) \quad + (- 5) - (- 8) =$$

Section 9. Addition with Brackets (Mixed Signs)

Solve each problem and write the answer in the box.

$$(1) \quad + (+10) - (+6) =$$

$$(7) \quad + (+15) - (+4) =$$

$$(2) \quad + (-2) - (+8) =$$

$$(8) \quad + (+13) - (+8) =$$

$$(3) \quad + (-12) + (+12) =$$

$$(9) \quad + (-4) + (+11) =$$

$$(4) \quad + (-15) + (+12) =$$

$$(10) \quad + (-10) - (-12) =$$

$$(5) \quad + (+6) + (+5) =$$

$$(11) \quad + (-3) - (+15) =$$

$$(6) \quad + (-5) + (-4) =$$

$$(12) \quad + (-7) - (+11) =$$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $-2 - 10 =$

(7) $10 - 10 =$

(2) $7 - 20 =$

(8) $2 - 16 =$

(3) $2 - 13 =$

(9) $7 - 18 =$

(4) $4 - 17 =$

(10) $-8 - 19 =$

(5) $-8 - 17 =$

(11) $6 - 18 =$

(6) $0 - 11 =$

(12) $10 - 20 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $0 - 11 =$

(7) $-6 - 11 =$

(2) $-9 - 20 =$

(8) $9 - 19 =$

(3) $4 - 17 =$

(9) $6 - 16 =$

(4) $5 - 10 =$

(10) $9 - 13 =$

(5) $7 - 16 =$

(11) $2 - 15 =$

(6) $6 - 12 =$

(12) $4 - 12 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $3 - 19 =$

(7) $8 - 19 =$

(2) $7 - 15 =$

(8) $7 - 14 =$

(3) $-4 - 13 =$

(9) $-10 - 18 =$

(4) $1 - 20 =$

(10) $-10 - 16 =$

(5) $10 - 12 =$

(11) $-9 - 20 =$

(6) $-7 - 15 =$

(12) $-4 - 14 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $0 - 15 =$

(7) $10 - 14 =$

(2) $-3 - 17 =$

(8) $-7 - 10 =$

(3) $7 - 19 =$

(9) $5 - 12 =$

(4) $1 - 17 =$

(10) $-7 - 14 =$

(5) $-7 - 20 =$

(11) $-4 - 11 =$

(6) $-10 - 15 =$

(12) $-4 - 17 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $-1 - 20 =$

(7) $-3 - 18 =$

(2) $-6 - 10 =$

(8) $-9 - 16 =$

(3) $-4 - 18 =$

(9) $3 - 20 =$

(4) $1 - 17 =$

(10) $7 - 10 =$

(5) $9 - 20 =$

(11) $-2 - 13 =$

(6) $10 - 18 =$

(12) $-3 - 20 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $-8 - 15 =$

(7) $-4 - 19 =$

(2) $-5 - 18 =$

(8) $7 - 20 =$

(3) $6 - 12 =$

(9) $-7 - 20 =$

(4) $7 - 18 =$

(10) $4 - 13 =$

(5) $-4 - 20 =$

(11) $-9 - 20 =$

(6) $0 - 15 =$

(12) $2 - 11 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $-2 - 18 =$

(7) $-5 - 18 =$

(2) $-10 - 18 =$

(8) $10 - 11 =$

(3) $6 - 18 =$

(9) $-7 - 13 =$

(4) $5 - 10 =$

(10) $-10 - 17 =$

(5) $10 - 13 =$

(11) $-9 - 11 =$

(6) $6 - 11 =$

(12) $-9 - 12 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $8 - 18 =$

(7) $-6 - 12 =$

(2) $-4 - 14 =$

(8) $-10 - 15 =$

(3) $-5 - 20 =$

(9) $-6 - 10 =$

(4) $-5 - 12 =$

(10) $0 - 19 =$

(5) $2 - 10 =$

(11) $10 - 19 =$

(6) $-2 - 18 =$

(12) $5 - 19 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $7 - 11 =$

(7) $8 - 10 =$

(2) $-2 - 16 =$

(8) $1 - 18 =$

(3) $4 - 20 =$

(9) $-1 - 20 =$

(4) $3 - 15 =$

(10) $9 - 11 =$

(5) $2 - 20 =$

(11) $4 - 16 =$

(6) $7 - 10 =$

(12) $-10 - 17 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $7 - 17 =$

(7) $-4 - 15 =$

(2) $-1 - 20 =$

(8) $4 - 15 =$

(3) $-2 - 11 =$

(9) $8 - 12 =$

(4) $8 - 17 =$

(10) $0 - 16 =$

(5) $1 - 12 =$

(11) $-10 - 15 =$

(6) $-7 - 14 =$

(12) $-3 - 20 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $-2 - 15 =$

(7) $-2 - 20 =$

(2) $0 - 17 =$

(8) $-8 - 10 =$

(3) $4 - 15 =$

(9) $8 - 19 =$

(4) $5 - 18 =$

(10) $8 - 13 =$

(5) $-5 - 20 =$

(11) $7 - 14 =$

(6) $-2 - 12 =$

(12) $10 - 12 =$

Section 10. Negative Results from Subtraction

Solve each problem and write the answer in the box.

(1) $7 - 13 =$

(7) $8 - 19 =$

(2) $2 - 18 =$

(8) $-1 - 13 =$

(3) $10 - 12 =$

(9) $-4 - 16 =$

(4) $10 - 15 =$

(10) $-5 - 12 =$

(5) $7 - 18 =$

(11) $9 - 14 =$

(6) $-7 - 10 =$

(12) $-7 - 12 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $0 - (-5) =$

(7) $6 + 6 =$

(2) $-8 - 2 =$

(8) $11 + 11 =$

(3) $0 - 1 =$

(9) $-1 - (-11) =$

(4) $9 - 5 =$

(10) $12 + 3 =$

(5) $12 + 4 =$

(11) $-10 - 4 =$

(6) $2 - 7 =$

(12) $-5 - (-11) =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $-7 - (-5) =$

(7) $3 + 9 =$

(2) $4 + 8 =$

(8) $3 - (-6) =$

(3) $-6 - (-8) =$

(9) $8 + 1 =$

(4) $-7 - 1 =$

(10) $-5 - 11 =$

(5) $9 - 5 =$

(11) $6 + 6 =$

(6) $-2 - 11 =$

(12) $-8 + 8 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $6 - 8 =$

(7) $- 7 - (- 5) =$

(2) $- 7 - 4 =$

(8) $7 - (- 8) =$

(3) $4 + 0 =$

(9) $7 + 9 =$

(4) $11 + 11 =$

(10) $- 7 - 11 =$

(5) $- 10 - (- 6) =$

(11) $2 - 7 =$

(6) $7 - 3 =$

(12) $- 5 + 0 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $4 - 1 =$

(7) $- 1 - 6 =$

(2) $3 - 2 =$

(8) $4 - 4 =$

(3) $- 11 + 8 =$

(9) $- 5 - 4 =$

(4) $- 9 - 10 =$

(10) $- 1 - (- 1) =$

(5) $11 - (- 4) =$

(11) $3 - 7 =$

(6) $0 + 8 =$

(12) $4 - 8 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $-8 - (-9) =$

(7) $7 + 5 =$

(2) $-6 + 4 =$

(8) $12 + 9 =$

(3) $-8 - 7 =$

(9) $4 - 1 =$

(4) $-7 + 3 =$

(10) $-11 - 10 =$

(5) $5 + 4 =$

(11) $-5 - 3 =$

(6) $-10 + 3 =$

(12) $-1 - 6 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $9 - 0 =$

(7) $11 - 5 =$

(2) $1 + 5 =$

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

(3) $-7 - (-1) =$

(9) $-6 + 4 =$

(4) $-4 - (-3) =$

(10) $-2 - 5 =$

(5) $12 - 10 =$

(11) $-7 + 0 =$

(6) $11 - (-8) =$

(12) $-10 - 8 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $7 - 1 =$

(7) $12 - 7 =$

(2) $- 10 - 4 =$

(8) $2 - (- 12) =$

(3) $- 1 - 10 =$

(9) $9 + 4 =$

(4) $11 + 0 =$

(10) $- 6 - (- 11) =$

(5) $7 - 8 =$

(11) $7 - 7 =$

(6) $10 - 7 =$

(12) $- 1 - 5 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $1 - 8 =$

(7) $4 - 12 =$

(2) $3 - 12 =$

(8) $8 - (-6) =$

(3) $-10 - 3 =$

(9) $1 - (-1) =$

(4) $-4 - (-6) =$

(10) $-8 + 1 =$

(5) $10 + 11 =$

(11) $-4 - 5 =$

(6) $6 + 4 =$

(12) $6 - (-1) =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $-7 - 10 =$

(7) $11 - 5 =$

(2) $12 - 0 =$

(8) $-1 - (-4) =$

(3) $9 - 0 =$

(9) $7 - 6 =$

(4) $6 - (-6) =$

(10) $0 - 6 =$

(5) $11 + 10 =$

(11) $-4 - 7 =$

(6) $-10 + 5 =$

(12) $4 - (-9) =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $10 - 4 =$

(7) $- 7 - 11 =$

(2) $- 3 - 10 =$

(8) $3 + 11 =$

(3) $9 - 11 =$

(9) $- 5 + 11 =$

(4) $- 10 - 5 =$

(10) $- 4 - 6 =$

(5) $3 - 2 =$

(11) $- 6 - 5 =$

(6) $- 6 - 6 =$

(12) $- 8 - 12 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $-9 - 10 =$

(7) $-11 + 4 =$

(2) $7 - (-12) =$

(8) $3 - 5 =$

(3) $3 - 1 =$

(9) $4 - 1 =$

(4) $3 - 6 =$

(10) $9 - 12 =$

(5) $3 - (-7) =$

(11) $2 - 9 =$

(6) $0 - (-5) =$

(12) $-2 - 10 =$

Section 11. Controlled Mixed Signs

Solve each problem and write the answer in the box.

(1) $4 - 3 =$

(7) $9 - 2 =$

(2) $-9 - 4 =$

(8) $3 - 9 =$

(3) $5 - 6 =$

(9) $-10 - 0 =$

(4) $10 - 2 =$

(10) $9 + 10 =$

(5) $6 - 3 =$

(11) $-2 + 1 =$

(6) $12 - 2 =$

(12) $4 - 5 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $-20 - 7 =$

(7) $-9 - 11 =$

(2) $17 - (-14) =$

(8) $-7 - 6 =$

(3) $3 - 19 =$

(9) $3 - 5 =$

(4) $-9 - 15 =$

(10) $8 - (-9) =$

(5) $-5 - (-3) =$

(11) $16 - 6 =$

(6) $19 - 1 =$

(12) $-3 - 5 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $-13 - 2 =$

(7) $-10 + 20 =$

(2) $16 + 16 =$

(8) $6 - 20 =$

(3) $-2 + 2 =$

(9) $-16 - (-15) =$

(4) $12 - 11 =$

(10) $1 - 6 =$

(5) $-15 - 4 =$

(11) $0 - (-2) =$

(6) $9 - 20 =$

(12) $18 - 5 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $8 - 3 =$

(7) $15 - (- 17) =$

(2) $6 - (- 10) =$

(8) $5 + 13 =$

(3) $- 19 - 12 =$

(9) $- 14 - 4 =$

(4) $- 4 - 15 =$

(10) $- 15 + 4 =$

(5) $- 10 + 5 =$

(11) $- 6 - (- 5) =$

(6) $- 14 - 16 =$

(12) $8 - 20 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $4 - (-8) =$

(7) $5 - 14 =$

(2) $-11 + 10 =$

(8) $-17 - 7 =$

(3) $-9 + 6 =$

(9) $10 - 20 =$

(4) $-12 - 20 =$

(10) $8 + 1 =$

(5) $11 - (-1) =$

(11) $3 - 3 =$

(6) $15 - 16 =$

(12) $2 - (-19) =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $-12 + 13 =$

(7) $20 - 20 =$

(2) $-19 - 18 =$

(8) $13 - 20 =$

(3) $0 - 10 =$

(9) $2 - 10 =$

(4) $14 - (-3) =$

(10) $-15 + 8 =$

(5) $-12 - 14 =$

(11) $3 - 6 =$

(6) $17 + 18 =$

(12) $-11 - (-1) =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $6 - (-8) =$

(7) $-17 + 14 =$

(2) $-9 - 12 =$

(8) $-9 - 14 =$

(3) $-13 - 20 =$

(9) $-3 - (-12) =$

(4) $19 - 8 =$

(10) $-20 - (-6) =$

(5) $19 - 11 =$

(11) $-11 - 20 =$

(6) $0 - 19 =$

(12) $-7 - 1 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $-1 - 11 =$

(7) $-20 - (-13) =$

(2) $9 - (-18) =$

(8) $4 + 8 =$

(3) $-15 - (-11) =$

(9) $-18 - 8 =$

(4) $-3 + 5 =$

(10) $-14 - 13 =$

(5) $14 + 10 =$

(11) $10 + 4 =$

(6) $-8 - 4 =$

(12) $0 - (-10) =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $-20 + 13 =$

(7) $-8 - 6 =$

(2) $2 - 2 =$

(8) $5 - (-5) =$

(3) $14 - (-20) =$

(9) $4 + 4 =$

(4) $10 - (-1) =$

(10) $-4 - 15 =$

(5) $7 - 2 =$

(11) $20 - (-5) =$

(6) $-20 + 15 =$

(12) $-2 - 14 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $15 + 13 =$

(7) $17 - (-13) =$

(2) $-4 + 10 =$

(8) $-5 - (-20) =$

(3) $-8 - 3 =$

(9) $17 + 10 =$

(4) $-7 - 13 =$

(10) $3 - 15 =$

(5) $20 + 7 =$

(11) $-10 + 11 =$

(6) $-20 - (-10) =$

(12) $19 + 1 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $8 - 2 =$

(7) $- 8 - 13 =$

(2) $14 - 3 =$

(8) $15 - (- 11) =$

(3) $- 20 - 20 =$

(9) $0 - 6 =$

(4) $- 9 - (- 19) =$

(10) $- 13 - (- 14) =$

(5) $19 - (- 5) =$

(11) $- 18 - 12 =$

(6) $- 16 - 14 =$

(12) $- 18 - 8 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $11 - 8 =$

(7) $9 + 20 =$

(2) $-18 + 16 =$

(8) $3 + 15 =$

(3) $11 - 13 =$

(9) $3 - (-17) =$

(4) $-17 - 3 =$

(10) $13 - (-18) =$

(5) $18 - 16 =$

(11) $-1 - 16 =$

(6) $-7 + 11 =$

(12) $13 - 14 =$

Section 12. Mixed with Zero

Solve each problem and write the answer in the box.

(1) $-17 + 2 =$

(7) $-18 - 11 =$

(2) $14 - 14 =$

(8) $15 - (-2) =$

(3) $11 - 6 =$

(9) $-8 - 16 =$

(4) $15 - 2 =$

(10) $14 + 2 =$

(5) $-8 - (-19) =$

(11) $9 - (-3) =$

(6) $2 - (-12) =$

(12) $-16 + 13 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $16 - 16 =$

(7) $26 - (- 24) =$

(2) $- 18 - (- 18) =$

(8) $20 - 19 =$

(3) $6 + 10 =$

(9) $2 - (- 9) =$

(4) $5 + 17 =$

(10) $4 + 8 =$

(5) $17 - (- 24) =$

(11) $29 - (- 8) =$

(6) $13 - (- 1) =$

(12) $5 - (- 10) =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-24 - 28 =$

(7) $16 - 26 =$

(2) $-8 - (-21) =$

(8) $20 - 0 =$

(3) $-14 - 7 =$

(9) $1 + 22 =$

(4) $-16 - 14 =$

(10) $8 + 11 =$

(5) $-25 - 6 =$

(11) $-28 - 16 =$

(6) $6 - 28 =$

(12) $-25 - 19 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $28 + 19 =$

(7) $- 27 - (- 11) =$

(2) $- 8 - 26 =$

(8) $- 10 + 4 =$

(3) $- 4 - 29 =$

(9) $- 10 + 2 =$

(4) $25 + 19 =$

(10) $- 21 - 27 =$

(5) $17 + 11 =$

(11) $- 2 - 18 =$

(6) $10 + 19 =$

(12) $- 16 - 3 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-4 - 18 =$

(7) $-12 + 8 =$

(2) $22 - 16 =$

(8) $3 - 22 =$

(3) $8 - (-15) =$

(9) $-30 - (-11) =$

(4) $-6 + 19 =$

(10) $-17 + 24 =$

(5) $-7 - (-2) =$

(11) $-29 - 19 =$

(6) $-5 - (-30) =$

(12) $28 - 5 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $20 - (-5) =$

(7) $18 - 22 =$

(2) $-22 - 9 =$

(8) $5 - (-18) =$

(3) $0 + 6 =$

(9) $-5 - 11 =$

(4) $5 - 5 =$

(10) $5 + 9 =$

(5) $-25 - (-5) =$

(11) $-15 - 26 =$

(6) $19 - 14 =$

(12) $19 - (-3) =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-15 + 30 =$

(7) $-17 + 4 =$

(2) $25 + 23 =$

(8) $5 - 0 =$

(3) $-30 - (-9) =$

(9) $14 + 14 =$

(4) $-11 - 2 =$

(10) $-6 + 7 =$

(5) $-29 - (-9) =$

(11) $-14 - 20 =$

(6) $17 + 4 =$

(12) $-12 - 18 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-27 - (-1) =$

(7) $27 - 10 =$

(2) $-26 - 6 =$

(8) $25 - 8 =$

(3) $12 - 24 =$

(9) $-19 - 18 =$

(4) $25 - (-24) =$

(10) $5 - 29 =$

(5) $-12 + 25 =$

(11) $-28 - 15 =$

(6) $-16 - (-6) =$

(12) $-9 - 1 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $13 - 29 =$

(7) $- 8 + 9 =$

(2) $- 23 + 12 =$

(8) $9 - (- 21) =$

(3) $- 3 - (- 7) =$

(9) $- 28 - 29 =$

(4) $- 18 - (- 10) =$

(10) $- 18 + 13 =$

(5) $8 - 11 =$

(11) $- 21 - 18 =$

(6) $19 - 11 =$

(12) $- 23 + 17 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $17 - (-20) =$

(7) $30 + 5 =$

(2) $-8 + 13 =$

(8) $-16 - (-21) =$

(3) $-8 - 10 =$

(9) $27 - (-5) =$

(4) $-15 - 2 =$

(10) $-25 + 16 =$

(5) $21 - (-27) =$

(11) $3 - 13 =$

(6) $26 - (-6) =$

(12) $-4 - 15 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-11 - (-2) =$

(7) $13 - 29 =$

(2) $-21 - 19 =$

(8) $-25 - 14 =$

(3) $-24 - 22 =$

(9) $-22 - 2 =$

(4) $-29 + 18 =$

(10) $15 - 11 =$

(5) $8 - 6 =$

(11) $-19 - 24 =$

(6) $8 - 16 =$

(12) $1 - 0 =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-20 - 18 =$

(7) $25 - 9 =$

(2) $-28 - 4 =$

(8) $14 - (-10) =$

(3) $29 - 13 =$

(9) $26 - (-15) =$

(4) $-16 - 17 =$

(10) $-5 - 19 =$

(5) $18 - 17 =$

(11) $8 + 17 =$

(6) $-19 + 29 =$

(12) $16 - (-10) =$

Section 13. Mixed Signs: Wider Range

Solve each problem and write the answer in the box.

(1) $-3 - 11 =$

(7) $-3 + 28 =$

(2) $-2 - 4 =$

(8) $11 + 29 =$

(3) $-17 + 11 =$

(9) $-10 - 26 =$

(4) $7 + 4 =$

(10) $-19 - 10 =$

(5) $25 - 22 =$

(11) $16 - 29 =$

(6) $14 - 15 =$

(12) $26 - (-4) =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $38 - 33 =$

(7) $-16 - 3 =$

(2) $26 - 27 =$

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

(3) $18 - (-35) =$

(9) $19 - (-19) =$

(4) $26 + 28 =$

(10) $-3 - 38 =$

(5) $-35 - 31 =$

(11) $26 - 22 =$

(6) $26 - 40 =$

(12) $17 - (-29) =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $-22 - 18 =$

(7) $23 - 29 =$

(2) $13 - 1 =$

(8) $37 + 23 =$

(3) $17 - (-4) =$

(9) $-13 + 35 =$

(4) $-25 - 24 =$

(10) $18 - 12 =$

(5) $-40 + 39 =$

(11) $-30 - 36 =$

(6) $-39 - 18 =$

(12) $-9 + 30 =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $39 - 40 =$

(7) $-20 - 4 =$

(2) $-34 - 17 =$

(8) $18 + 34 =$

(3) $-33 + 4 =$

(9) $-36 - (-29) =$

(4) $-22 - 36 =$

(10) $1 - 7 =$

(5) $2 - (-29) =$

(11) $-32 - 14 =$

(6) $-27 + 13 =$

(12) $-3 + 20 =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $-17 + 34 =$

(7) $-29 - 26 =$

(2) $10 + 12 =$

(8) $6 - (-30) =$

(3) $17 - (-37) =$

(9) $25 - 38 =$

(4) $18 + 35 =$

(10) $8 + 30 =$

(5) $18 - 29 =$

(11) $-35 - (-19) =$

(6) $1 - (-20) =$

(12) $32 - (-21) =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $-25 - 5 =$

(7) $-7 - 27 =$

(2) $27 - 12 =$

(8) $-24 - 38 =$

(3) $-14 + 38 =$

(9) $26 - 40 =$

(4) $-27 + 33 =$

(10) $23 - (-17) =$

(5) $21 + 37 =$

(11) $-3 - 16 =$

(6) $14 - 37 =$

(12) $-25 - 37 =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $-21 - 40 =$

(7) $-5 - 37 =$

(2) $28 - 2 =$

(8) $8 - 40 =$

(3) $12 - (-33) =$

(9) $33 + 37 =$

(4) $32 - 0 =$

(10) $-17 - 36 =$

(5) $-14 + 33 =$

(11) $-1 + 0 =$

(6) $5 - (-32) =$

(12) $-6 + 12 =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $23 - 10 =$

(7) $24 - (- 21) =$

(2) $17 - (- 2) =$

(8) $3 + 21 =$

(3) $27 - 2 =$

(9) $1 - (- 22) =$

(4) $- 26 + 7 =$

(10) $26 - 24 =$

(5) $- 15 - 29 =$

(11) $- 36 + 18 =$

(6) $24 - (- 37) =$

(12) $26 - (- 26) =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $40 - (- 25) =$

(7) $24 - 30 =$

(2) $38 + 13 =$

(8) $- 40 - (- 26) =$

(3) $- 35 - 2 =$

(9) $3 - 10 =$

(4) $31 - (- 13) =$

(10) $- 18 - 16 =$

(5) $- 15 - 4 =$

(11) $3 - 21 =$

(6) $- 32 - (- 1) =$

(12) $- 36 - (- 23) =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $-1 - 35 =$

(7) $28 - 0 =$

(2) $2 + 19 =$

(8) $-25 - (-6) =$

(3) $-27 + 26 =$

(9) $-20 - 5 =$

(4) $-38 - 33 =$

(10) $-39 + 39 =$

(5) $-14 - 1 =$

(11) $-14 + 29 =$

(6) $-16 - 4 =$

(12) $30 - 0 =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $18 - 1 =$

(7) $20 - 26 =$

(2) $20 - (-11) =$

(8) $21 - 19 =$

(3) $-22 + 38 =$

(9) $-4 + 4 =$

(4) $6 - 10 =$

(10) $25 - 27 =$

(5) $2 + 1 =$

(11) $-27 - 1 =$

(6) $22 - (-37) =$

(12) $-2 + 28 =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $11 - 35 =$

(7) $29 - (- 10) =$

(2) $- 10 - 39 =$

(8) $- 31 + 33 =$

(3) $30 - 20 =$

(9) $- 26 - 35 =$

(4) $9 - (- 32) =$

(10) $1 - 31 =$

(5) $- 14 - 35 =$

(11) $16 - 18 =$

(6) $15 - 32 =$

(12) $11 - (- 32) =$

Section 14. Near Boundaries: -40 to 40

Solve each problem and write the answer in the box.

(1) $-22 - (-4) =$

(7) $14 + 10 =$

(2) $-19 - 31 =$

(8) $36 + 35 =$

(3) $38 - 3 =$

(9) $38 - 5 =$

(4) $-34 - (-24) =$

(10) $2 - (-15) =$

(5) $20 - 34 =$

(11) $19 + 32 =$

(6) $9 - 34 =$

(12) $-29 + 19 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $36 + 8 =$

(7) $-15 - (-14) =$

(2) $23 - (-33) =$

(8) $-2 - 32 =$

(3) $-13 - 23 =$

(9) $15 - 4 =$

(4) $-22 - 21 =$

(10) $34 - 39 =$

(5) $28 - (-3) =$

(11) $-24 - (-3) =$

(6) $38 - 33 =$

(12) $7 + 30 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $-30 - 23 =$

(7) $33 + 23 =$

(2) $18 - 37 =$

(8) $24 - 6 =$

(3) $39 - (-17) =$

(9) $29 - 33 =$

(4) $25 - 14 =$

(10) $-36 - (-36) =$

(5) $9 - 5 =$

(11) $7 - (-26) =$

(6) $-17 + 14 =$

(12) $-30 - (-22) =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $19 - 26 =$

(7) $18 - 25 =$

(2) $26 + 38 =$

(8) $33 - 2 =$

(3) $-9 + 20 =$

(9) $5 - (-3) =$

(4) $29 + 34 =$

(10) $-19 - (-36) =$

(5) $38 - (-34) =$

(11) $32 - (-7) =$

(6) $28 - (-39) =$

(12) $40 + 20 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $-40 + 31 =$

(7) $20 - 23 =$

(2) $-26 - (-4) =$

(8) $31 + 9 =$

(3) $-10 + 15 =$

(9) $13 - (-21) =$

(4) $40 - 0 =$

(10) $-24 - (-23) =$

(5) $11 - 8 =$

(11) $-31 - 38 =$

(6) $29 - (-13) =$

(12) $22 + 15 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $33 - 34 =$

(7) $- 26 + 37 =$

(2) $39 - (- 37) =$

(8) $35 - 21 =$

(3) $22 - (- 30) =$

(9) $7 - (- 18) =$

(4) $24 - 31 =$

(10) $- 10 - 22 =$

(5) $- 8 - (- 24) =$

(11) $27 - 36 =$

(6) $- 5 - (- 8) =$

(12) $- 30 - (- 22) =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $15 - 38 =$

(7) $-39 - 32 =$

(2) $2 - (-6) =$

(8) $12 - 28 =$

(3) $-28 - (-8) =$

(9) $17 + 4 =$

(4) $19 - (-10) =$

(10) $-4 - 8 =$

(5) $26 + 3 =$

(11) $-36 - 37 =$

(6) $0 + 30 =$

(12) $-33 + 36 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $36 - 25 =$

(7) $1 - (-8) =$

(2) $-29 + 37 =$

(8) $-31 - 5 =$

(3) $8 + 32 =$

(9) $8 + 9 =$

(4) $-26 - 17 =$

(10) $-33 - (-7) =$

(5) $-3 - 19 =$

(11) $-18 - 16 =$

(6) $18 - 5 =$

(12) $22 - 15 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $23 + 12 =$

(7) $20 - 28 =$

(2) $-10 - 16 =$

(8) $8 + 9 =$

(3) $-14 + 33 =$

(9) $-7 - (-22) =$

(4) $-34 - (-7) =$

(10) $-39 - (-4) =$

(5) $-34 - 19 =$

(11) $8 - 0 =$

(6) $11 - 20 =$

(12) $-28 + 28 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $-18 - 22 =$

(7) $-38 - 23 =$

(2) $-22 + 29 =$

(8) $-40 - 36 =$

(3) $-13 - 38 =$

(9) $-6 - (-21) =$

(4) $16 - 7 =$

(10) $10 - 33 =$

(5) $-36 - 31 =$

(11) $25 + 22 =$

(6) $33 - 8 =$

(12) $15 - 11 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $-16 - 37 =$

(7) $-25 - (-13) =$

(2) $22 + 9 =$

(8) $28 - (-21) =$

(3) $29 - 1 =$

(9) $-31 - 36 =$

(4) $28 - 17 =$

(10) $22 - 38 =$

(5) $-36 + 3 =$

(11) $39 - (-35) =$

(6) $3 - 35 =$

(12) $-24 - 39 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $40 - 34 =$

(7) $-25 - 33 =$

(2) $-28 - 18 =$

(8) $1 - 13 =$

(3) $35 - 32 =$

(9) $35 - 18 =$

(4) $-26 + 23 =$

(10) $-32 - (-25) =$

(5) $-32 - 15 =$

(11) $-22 - 13 =$

(6) $3 - 11 =$

(12) $7 + 30 =$

Section 15. Final Revision: All Concepts

Solve each problem and write the answer in the box.

(1) $29 - 12 =$

(7) $-30 - 18 =$

(2) $9 + 21 =$

(8) $-15 - (-18) =$

(3) $32 + 28 =$

(9) $9 - 16 =$

(4) $2 - (-2) =$

(10) $9 - (-27) =$

(5) $-33 - 40 =$

(11) $22 - (-30) =$

(6) $6 + 28 =$

(12) $-16 - (-23) =$

1a-1	0	2a-1	1	3a-1	6	4a-1	4
1a-2	3	2a-2	6	3a-2	8	4a-2	2
1a-3	-1	2a-3	-2	3a-3	0	4a-3	0
1a-4	5	2a-4	-2	3a-4	1	4a-4	-1
1a-5	1	2a-5	1	3a-5	-1	4a-5	3
1a-6	-1	2a-6	6	3a-6	2	4a-6	-1
1a-7	0	2a-7	2	3a-7	4	4a-7	4
1a-8	5	2a-8	4	3a-8	-2	4a-8	-1
1a-9	-1	2a-9	0	3a-9	4	4a-9	4
1a-10	5	2a-10	3	3a-10	-2	4a-10	-1
1a-11	6	2a-11	-1	3a-11	0	4a-11	6
1a-12	3	2a-12	1	3a-12	2	4a-12	-2
1b-1	-1	2b-1	0	3b-1	1	4b-1	0
1b-2	-2	2b-2	1	3b-2	-1	4b-2	0
1b-3	-2	2b-3	4	3b-3	4	4b-3	1
1b-4	3	2b-4	4	3b-4	2	4b-4	2
1b-5	2	2b-5	-2	3b-5	8	4b-5	1
1b-6	1	2b-6	3	3b-6	1	4b-6	-1
1b-7	0	2b-7	-2	3b-7	4	4b-7	1
1b-8	4	2b-8	-1	3b-8	-1	4b-8	-2
1b-9	4	2b-9	3	3b-9	2	4b-9	1
1b-10	4	2b-10	5	3b-10	-2	4b-10	0
1b-11	4	2b-11	2	3b-11	-2	4b-11	1
1b-12	-1	2b-12	1	3b-12	2	4b-12	1

5a-1	0	6a-1	-2	7a-1	-10	8a-1	6
5a-2	0	6a-2	1	7a-2	-10	8a-2	-6
5a-3	2	6a-3	0	7a-3	6	8a-3	1
5a-4	1	6a-4	5	7a-4	4	8a-4	-2
5a-5	6	6a-5	3	7a-5	6	8a-5	6
5a-6	0	6a-6	-2	7a-6	7	8a-6	-1
5a-7	3	6a-7	1	7a-7	3	8a-7	-10
5a-8	4	6a-8	8	7a-8	-1	8a-8	8
5a-9	-1	6a-9	-2	7a-9	6	8a-9	-5
5a-10	1	6a-10	-1	7a-10	1	8a-10	1
5a-11	2	6a-11	0	7a-11	0	8a-11	4
5a-12	1	6a-12	2	7a-12	-9	8a-12	1
5b-1	2	6b-1	4	7b-1	-5	8b-1	-6
5b-2	2	6b-2	0	7b-2	-8	8b-2	-3
5b-3	7	6b-3	1	7b-3	6	8b-3	-3
5b-4	2	6b-4	-2	7b-4	-10	8b-4	-3
5b-5	0	6b-5	6	7b-5	1	8b-5	0
5b-6	7	6b-6	0	7b-6	10	8b-6	11
5b-7	6	6b-7	5	7b-7	-3	8b-7	-6
5b-8	-2	6b-8	0	7b-8	4	8b-8	-5
5b-9	9	6b-9	2	7b-9	-7	8b-9	4
5b-10	-1	6b-10	6	7b-10	-2	8b-10	9
5b-11	4	6b-11	-1	7b-11	1	8b-11	-8
5b-12	6	6b-12	-1	7b-12	-12	8b-12	-1

9a-1	3	10a-1	2	11a-1	3	12a-1	7
9a-2	-7	10a-2	1	11a-2	-5	12a-2	-1
9a-3	4	10a-3	11	11a-3	-6	12a-3	-1
9a-4	11	10a-4	-9	11a-4	0	12a-4	-3
9a-5	-13	10a-5	11	11a-5	-10	12a-5	2
9a-6	-1	10a-6	2	11a-6	8	12a-6	-5
9a-7	-6	10a-7	-7	11a-7	5	12a-7	-1
9a-8	-10	10a-8	3	11a-8	7	12a-8	4
9a-9	-6	10a-9	0	11a-9	-4	12a-9	3
9a-10	7	10a-10	-5	11a-10	-3	12a-10	-9
9a-11	5	10a-11	-3	11a-11	12	12a-11	2
9a-12	5	10a-12	5	11a-12	4	12a-12	1
9b-1	-4	10b-1	-6	11b-1	-6	12b-1	13
9b-2	-4	10b-2	0	11b-2	-1	12b-2	2
9b-3	3	10b-3	-3	11b-3	1	12b-3	-1
9b-4	0	10b-4	9	11b-4	3	12b-4	-11
9b-5	10	10b-5	1	11b-5	5	12b-5	9
9b-6	5	10b-6	7	11b-6	-10	12b-6	11
9b-7	-1	10b-7	-4	11b-7	0	12b-7	-1
9b-8	1	10b-8	6	11b-8	9	12b-8	-10
9b-9	1	10b-9	0	11b-9	-10	12b-9	-2
9b-10	1	10b-10	-7	11b-10	9	12b-10	1
9b-11	-1	10b-11	-5	11b-11	13	12b-11	-3
9b-12	7	10b-12	0	11b-12	10	12b-12	-7

13a-1	2	14a-1	-6	15a-1	-2	16a-1	-2
13a-2	-2	14a-2	4	15a-2	-1	16a-2	-1
13a-3	2	14a-3	3	15a-3	5	16a-3	-2
13a-4	-3	14a-4	7	15a-4	-1	16a-4	0
13a-5	-2	14a-5	1	15a-5	0	16a-5	-5
13a-6	-1	14a-6	0	15a-6	3	16a-6	2
13a-7	4	14a-7	1	15a-7	1	16a-7	0
13a-8	-6	14a-8	-1	15a-8	2	16a-8	4
13a-9	4	14a-9	-3	15a-9	3	16a-9	-3
13a-10	-4	14a-10	-1	15a-10	-3	16a-10	7
13a-11	-2	14a-11	1	15a-11	-3	16a-11	1
13a-12	0	14a-12	0	15a-12	1	16a-12	-5
13b-1	2	14b-1	-1	15b-1	-1	16b-1	-7
13b-2	-6	14b-2	-1	15b-2	-7	16b-2	-2
13b-3	3	14b-3	6	15b-3	0	16b-3	4
13b-4	2	14b-4	0	15b-4	-2	16b-4	-3
13b-5	2	14b-5	-4	15b-5	6	16b-5	5
13b-6	0	14b-6	-5	15b-6	-1	16b-6	1
13b-7	2	14b-7	1	15b-7	2	16b-7	1
13b-8	0	14b-8	-4	15b-8	-5	16b-8	-5
13b-9	1	14b-9	4	15b-9	-5	16b-9	2
13b-10	-2	14b-10	-5	15b-10	-3	16b-10	-1
13b-11	-2	14b-11	-3	15b-11	2	16b-11	-2
13b-12	-4	14b-12	6	15b-12	1	16b-12	-3

17a-1	3	18a-1	3	19a-1	5	20a-1	-5
17a-2	1	18a-2	-4	19a-2	3	20a-2	2
17a-3	1	18a-3	2	19a-3	0	20a-3	-5
17a-4	-2	18a-4	5	19a-4	1	20a-4	7
17a-5	0	18a-5	7	19a-5	0	20a-5	-3
17a-6	1	18a-6	-4	19a-6	4	20a-6	5
17a-7	1	18a-7	-4	19a-7	5	20a-7	-6
17a-8	-4	18a-8	1	19a-8	7	20a-8	6
17a-9	0	18a-9	1	19a-9	4	20a-9	5
17a-10	7	18a-10	-1	19a-10	-5	20a-10	0
17a-11	2	18a-11	-6	19a-11	-3	20a-11	2
17a-12	-3	18a-12	1	19a-12	-5	20a-12	-3
17b-1	-1	18b-1	6	19b-1	7	20b-1	-2
17b-2	-2	18b-2	-3	19b-2	3	20b-2	-4
17b-3	3	18b-3	-4	19b-3	10	20b-3	-3
17b-4	4	18b-4	-6	19b-4	0	20b-4	-1
17b-5	-2	18b-5	4	19b-5	-3	20b-5	8
17b-6	2	18b-6	-5	19b-6	-2	20b-6	-2
17b-7	-3	18b-7	-5	19b-7	-7	20b-7	2
17b-8	-4	18b-8	0	19b-8	-1	20b-8	-5
17b-9	-4	18b-9	7	19b-9	7	20b-9	0
17b-10	-6	18b-10	3	19b-10	0	20b-10	-6
17b-11	1	18b-11	-1	19b-11	-8	20b-11	-4
17b-12	5	18b-12	-3	19b-12	3	20b-12	-7

21a-1	2	22a-1	1	23a-1	-4	24a-1	1
21a-2	2	22a-2	-4	23a-2	-4	24a-2	4
21a-3	4	22a-3	3	23a-3	4	24a-3	-4
21a-4	1	22a-4	-3	23a-4	5	24a-4	6
21a-5	-8	22a-5	1	23a-5	-5	24a-5	0
21a-6	1	22a-6	-3	23a-6	9	24a-6	4
21a-7	-2	22a-7	-5	23a-7	2	24a-7	-8
21a-8	0	22a-8	0	23a-8	1	24a-8	3
21a-9	9	22a-9	0	23a-9	-9	24a-9	7
21a-10	1	22a-10	-2	23a-10	-6	24a-10	-5
21a-11	7	22a-11	-4	23a-11	-8	24a-11	6
21a-12	-1	22a-12	-1	23a-12	3	24a-12	-8
21b-1	-3	22b-1	5	23b-1	-1	24b-1	-4
21b-2	6	22b-2	-9	23b-2	3	24b-2	-3
21b-3	-7	22b-3	-3	23b-3	-1	24b-3	-1
21b-4	-3	22b-4	-5	23b-4	-2	24b-4	10
21b-5	-2	22b-5	4	23b-5	3	24b-5	1
21b-6	-1	22b-6	1	23b-6	2	24b-6	8
21b-7	-2	22b-7	0	23b-7	-5	24b-7	4
21b-8	0	22b-8	-1	23b-8	2	24b-8	-1
21b-9	4	22b-9	8	23b-9	-1	24b-9	4
21b-10	0	22b-10	-2	23b-10	-4	24b-10	-5
21b-11	2	22b-11	-1	23b-11	2	24b-11	1
21b-12	-3	22b-12	-7	23b-12	3	24b-12	2

25a-1	-6	26a-1	19	27a-1	9	28a-1	12
25a-2	1	26a-2	9	27a-2	6	28a-2	6
25a-3	9	26a-3	-2	27a-3	11	28a-3	12
25a-4	2	26a-4	-7	27a-4	8	28a-4	4
25a-5	11	26a-5	-7	27a-5	-5	28a-5	6
25a-6	13	26a-6	16	27a-6	4	28a-6	-6
25a-7	-2	26a-7	9	27a-7	-6	28a-7	11
25a-8	-5	26a-8	4	27a-8	0	28a-8	-2
25a-9	6	26a-9	12	27a-9	-1	28a-9	3
25a-10	2	26a-10	13	27a-10	13	28a-10	-1
25a-11	12	26a-11	10	27a-11	0	28a-11	6
25a-12	13	26a-12	9	27a-12	19	28a-12	2
25b-1	-5	26b-1	4	27b-1	16	28b-1	-1
25b-2	11	26b-2	13	27b-2	-5	28b-2	14
25b-3	3	26b-3	1	27b-3	3	28b-3	6
25b-4	2	26b-4	-7	27b-4	4	28b-4	2
25b-5	4	26b-5	8	27b-5	0	28b-5	10
25b-6	7	26b-6	16	27b-6	-5	28b-6	6
25b-7	-5	26b-7	5	27b-7	16	28b-7	3
25b-8	-2	26b-8	13	27b-8	0	28b-8	0
25b-9	5	26b-9	2	27b-9	11	28b-9	-3
25b-10	12	26b-10	12	27b-10	-2	28b-10	12
25b-11	3	26b-11	-2	27b-11	14	28b-11	-6
25b-12	18	26b-12	3	27b-12	13	28b-12	10

29a-1	2	30a-1	14	31a-1	-1	32a-1	-3
29a-2	-1	30a-2	9	31a-2	4	32a-2	-2
29a-3	4	30a-3	14	31a-3	-8	32a-3	-6
29a-4	17	30a-4	9	31a-4	-2	32a-4	-4
29a-5	-9	30a-5	-7	31a-5	8	32a-5	0
29a-6	7	30a-6	17	31a-6	3	32a-6	-5
29a-7	18	30a-7	4	31a-7	-6	32a-7	-7
29a-8	0	30a-8	15	31a-8	-6	32a-8	4
29a-9	4	30a-9	9	31a-9	-5	32a-9	-6
29a-10	16	30a-10	8	31a-10	-6	32a-10	1
29a-11	4	30a-11	5	31a-11	-4	32a-11	3
29a-12	8	30a-12	0	31a-12	-8	32a-12	-1
29b-1	1	30b-1	15	31b-1	0	32b-1	-7
29b-2	-4	30b-2	4	31b-2	4	32b-2	5
29b-3	-2	30b-3	-8	31b-3	-6	32b-3	3
29b-4	9	30b-4	2	31b-4	-10	32b-4	-13
29b-5	3	30b-5	8	31b-5	4	32b-5	-7
29b-6	0	30b-6	-4	31b-6	-2	32b-6	-2
29b-7	0	30b-7	4	31b-7	5	32b-7	5
29b-8	10	30b-8	6	31b-8	-5	32b-8	-9
29b-9	-4	30b-9	1	31b-9	-2	32b-9	-9
29b-10	10	30b-10	5	31b-10	-3	32b-10	-12
29b-11	14	30b-11	15	31b-11	2	32b-11	-5
29b-12	4	30b-12	1	31b-12	-3	32b-12	1

33a-1	-6	34a-1	-3	35a-1	-3	36a-1	5
33a-2	-2	34a-2	-6	35a-2	-6	36a-2	-3
33a-3	-10	34a-3	5	35a-3	-8	36a-3	-5
33a-4	-1	34a-4	-4	35a-4	5	36a-4	8
33a-5	-3	34a-5	-8	35a-5	-3	36a-5	5
33a-6	-3	34a-6	4	35a-6	2	36a-6	-13
33a-7	-4	34a-7	-5	35a-7	-5	36a-7	0
33a-8	0	34a-8	-7	35a-8	-2	36a-8	-5
33a-9	1	34a-9	2	35a-9	2	36a-9	-8
33a-10	-10	34a-10	2	35a-10	-1	36a-10	-3
33a-11	-8	34a-11	2	35a-11	8	36a-11	-9
33a-12	2	34a-12	3	35a-12	0	36a-12	-12
33b-1	-8	34b-1	-5	35b-1	-10	36b-1	1
33b-2	-7	34b-2	-5	35b-2	-9	36b-2	2
33b-3	-4	34b-3	-10	35b-3	4	36b-3	-13
33b-4	-4	34b-4	-3	35b-4	-1	36b-4	-6
33b-5	-6	34b-5	0	35b-5	5	36b-5	-2
33b-6	1	34b-6	6	35b-6	-2	36b-6	-14
33b-7	1	34b-7	2	35b-7	-3	36b-7	0
33b-8	4	34b-8	-4	35b-8	0	36b-8	-5
33b-9	-3	34b-9	7	35b-9	-2	36b-9	-5
33b-10	4	34b-10	1	35b-10	0	36b-10	-12
33b-11	-7	34b-11	-7	35b-11	-2	36b-11	5
33b-12	0	34b-12	3	35b-12	0	36b-12	-6

37a-1	6	38a-1	-5	39a-1	3	40a-1	6
37a-2	-5	38a-2	-10	39a-2	-2	40a-2	-2
37a-3	5	38a-3	0	39a-3	1	40a-3	10
37a-4	-2	38a-4	4	39a-4	0	40a-4	11
37a-5	7	38a-5	7	39a-5	-7	40a-5	-12
37a-6	6	38a-6	3	39a-6	-7	40a-6	-11
37a-7	2	38a-7	-3	39a-7	-1	40a-7	9
37a-8	1	38a-8	-9	39a-8	0	40a-8	-9
37a-9	-1	38a-9	-5	39a-9	-1	40a-9	10
37a-10	-3	38a-10	0	39a-10	-11	40a-10	-10
37a-11	0	38a-11	1	39a-11	-3	40a-11	-1
37a-12	0	38a-12	1	39a-12	2	40a-12	-1
37b-1	-3	38b-1	10	39b-1	6	40b-1	-13
37b-2	9	38b-2	-11	39b-2	-6	40b-2	13
37b-3	12	38b-3	6	39b-3	6	40b-3	11
37b-4	3	38b-4	2	39b-4	3	40b-4	4
37b-5	-4	38b-5	0	39b-5	0	40b-5	-4
37b-6	-1	38b-6	-13	39b-6	4	40b-6	9
37b-7	-4	38b-7	-3	39b-7	-9	40b-7	-4
37b-8	8	38b-8	-2	39b-8	-7	40b-8	2
37b-9	5	38b-9	-7	39b-9	3	40b-9	-7
37b-10	-6	38b-10	9	39b-10	-8	40b-10	4
37b-11	-1	38b-11	11	39b-11	-9	40b-11	10
37b-12	5	38b-12	12	39b-12	-1	40b-12	-2

41a-1	-10	42a-1	10	43a-1	-18	44a-1	-20
41a-2	0	42a-2	0	43a-2	-17	44a-2	-21
41a-3	-11	42a-3	13	43a-3	-27	44a-3	-17
41a-4	0	42a-4	-13	43a-4	-17	44a-4	-8
41a-5	-7	42a-5	-12	43a-5	-9	44a-5	-15
41a-6	1	42a-6	10	43a-6	-15	44a-6	-11
41a-7	-3	42a-7	-7	43a-7	-11	44a-7	-17
41a-8	0	42a-8	2	43a-8	-25	44a-8	-20
41a-9	10	42a-9	-6	43a-9	-7	44a-9	-26
41a-10	2	42a-10	-6	43a-10	-7	44a-10	-10
41a-11	-3	42a-11	2	43a-11	-8	44a-11	-5
41a-12	0	42a-12	4	43a-12	-12	44a-12	-19
41b-1	1	42b-1	0	43b-1	-18	44b-1	-4
41b-2	5	42b-2	6	43b-2	-18	44b-2	-11
41b-3	5	42b-3	-13	43b-3	-23	44b-3	-9
41b-4	-6	42b-4	-6	43b-4	-27	44b-4	-14
41b-5	10	42b-5	-1	43b-5	-22	44b-5	-22
41b-6	-13	42b-6	8	43b-6	-25	44b-6	-18
41b-7	11	42b-7	4	43b-7	-16	44b-7	-6
41b-8	-9	42b-8	1	43b-8	-17	44b-8	-23
41b-9	1	42b-9	5	43b-9	-30	44b-9	-24
41b-10	4	42b-10	-4	43b-10	-10	44b-10	-21
41b-11	13	42b-11	-9	43b-11	-17	44b-11	-19
41b-12	-13	42b-12	0	43b-12	-24	44b-12	-17

45a-1	-14	46a-1	-14	47a-1	-8	48a-1	-15
45a-2	-9	46a-2	-16	47a-2	-11	48a-2	-11
45a-3	-17	46a-3	-19	47a-3	-23	48a-3	-20
45a-4	-16	46a-4	-23	47a-4	-17	48a-4	-3
45a-5	-5	46a-5	-23	47a-5	-15	48a-5	-12
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45a-7	-26	46a-7	-19	47a-7	-19	48a-7	-25
45a-8	-25	46a-8	-13	47a-8	-15	48a-8	-16
45a-9	-23	46a-9	-16	47a-9	-14	48a-9	-25
45a-10	-17	46a-10	-10	47a-10	-10	48a-10	-23
45a-11	-8	46a-11	-9	47a-11	-14	48a-11	-11
45a-12	-16	46a-12	-22	47a-12	-12	48a-12	-21
45b-1	-19	46b-1	-9	47b-1	-28	48b-1	-16
45b-2	-18	46b-2	-12	47b-2	-22	48b-2	-20
45b-3	-28	46b-3	-7	47b-3	-24	48b-3	-18
45b-4	-22	46b-4	-19	47b-4	-16	48b-4	-15
45b-5	-13	46b-5	-10	47b-5	-12	48b-5	-13
45b-6	-16	46b-6	-13	47b-6	-11	48b-6	-23
45b-7	-26	46b-7	-17	47b-7	-12	48b-7	-6
45b-8	-15	46b-8	-26	47b-8	-22	48b-8	-26
45b-9	-24	46b-9	-15	47b-9	-6	48b-9	-28
45b-10	-13	46b-10	-24	47b-10	-14	48b-10	-14
45b-11	-25	46b-11	-14	47b-11	-15	48b-11	-17
45b-12	-22	46b-12	-7	47b-12	-5	48b-12	-14

49a-1	21	50a-1	3	51a-1	0	52a-1	-7
49a-2	14	50a-2	8	51a-2	-16	52a-2	-3
49a-3	-5	50a-3	-1	51a-3	-18	52a-3	-7
49a-4	-15	50a-4	7	51a-4	12	52a-4	-16
49a-5	-8	50a-5	17	51a-5	10	52a-5	10
49a-6	-15	50a-6	-18	51a-6	-7	52a-6	7
49a-7	16	50a-7	-19	51a-7	7	52a-7	-10
49a-8	2	50a-8	-2	51a-8	-17	52a-8	16
49a-9	-12	50a-9	21	51a-9	12	52a-9	-7
49a-10	15	50a-10	18	51a-10	-7	52a-10	-3
49a-11	7	50a-11	-12	51a-11	30	52a-11	-14
49a-12	-3	50a-12	-12	51a-12	-2	52a-12	-7
49b-1	-12	50b-1	3	51b-1	-9	52b-1	-2
49b-2	-13	50b-2	-13	51b-2	13	52b-2	-8
49b-3	-12	50b-3	-14	51b-3	-1	52b-3	7
49b-4	19	50b-4	13	51b-4	5	52b-4	0
49b-5	-2	50b-5	-11	51b-5	-2	52b-5	9
49b-6	2	50b-6	7	51b-6	3	52b-6	9
49b-7	-1	50b-7	-26	51b-7	9	52b-7	-18
49b-8	11	50b-8	-20	51b-8	-9	52b-8	-9
49b-9	-7	50b-9	-5	51b-9	-15	52b-9	2
49b-10	1	50b-10	-6	51b-10	8	52b-10	3
49b-11	0	50b-11	-4	51b-11	-13	52b-11	4
49b-12	10	50b-12	-10	51b-12	5	52b-12	2

53a-1	21	54a-1	-5	55a-1	-12	56a-1	-11
53a-2	3	54a-2	12	55a-2	-13	56a-2	-29
53a-3	-9	54a-3	-23	55a-3	-11	56a-3	-13
53a-4	2	54a-4	27	55a-4	-13	56a-4	-5
53a-5	-26	54a-5	-14	55a-5	-25	56a-5	-9
53a-6	10	54a-6	7	55a-6	-11	56a-6	-6
53a-7	16	54a-7	-14	55a-7	0	56a-7	-17
53a-8	6	54a-8	13	55a-8	-14	56a-8	-10
53a-9	-7	54a-9	18	55a-9	-11	56a-9	-10
53a-10	13	54a-10	14	55a-10	-27	56a-10	-4
53a-11	1	54a-11	-25	55a-11	-12	56a-11	-13
53a-12	6	54a-12	13	55a-12	-10	56a-12	-8
53b-1	4	54b-1	-2	55b-1	-15	56b-1	-16
53b-2	-10	54b-2	-22	55b-2	-20	56b-2	-8
53b-3	0	54b-3	21	55b-3	-12	56b-3	-17
53b-4	-3	54b-4	0	55b-4	-16	56b-4	-19
53b-5	11	54b-5	4	55b-5	-27	56b-5	-2
53b-6	-9	54b-6	-4	55b-6	-25	56b-6	-22
53b-7	11	54b-7	-22	55b-7	-4	56b-7	-11
53b-8	5	54b-8	-10	55b-8	-17	56b-8	-7
53b-9	7	54b-9	13	55b-9	-7	56b-9	-28
53b-10	2	54b-10	12	55b-10	-21	56b-10	-26
53b-11	-18	54b-11	-4	55b-11	-15	56b-11	-29
53b-12	-18	54b-12	3	55b-12	-21	56b-12	-18

57a-1	-21	58a-1	-23	59a-1	-4	60a-1	-10
57a-2	-16	58a-2	-23	59a-2	-18	60a-2	-21
57a-3	-22	58a-3	-6	59a-3	-16	60a-3	-13
57a-4	-16	58a-4	-11	59a-4	-12	60a-4	-9
57a-5	-11	58a-5	-24	59a-5	-18	60a-5	-11
57a-6	-8	58a-6	-15	59a-6	-3	60a-6	-21
57a-7	-21	58a-7	-23	59a-7	-2	60a-7	-19
57a-8	-25	58a-8	-13	59a-8	-17	60a-8	-11
57a-9	-17	58a-9	-27	59a-9	-21	60a-9	-4
57a-10	-3	58a-10	-9	59a-10	-2	60a-10	-16
57a-11	-15	58a-11	-29	59a-11	-12	60a-11	-25
57a-12	-23	58a-12	-9	59a-12	-27	60a-12	-23
57b-1	-10	58b-1	-20	59b-1	-6	60b-1	-17
57b-2	-18	58b-2	-28	59b-2	-16	60b-2	-17
57b-3	-25	58b-3	-12	59b-3	-2	60b-3	-11
57b-4	-17	58b-4	-5	59b-4	-5	60b-4	-13
57b-5	-8	58b-5	-3	59b-5	-11	60b-5	-25
57b-6	-20	58b-6	-5	59b-6	-17	60b-6	-14
57b-7	-18	58b-7	-23	59b-7	-11	60b-7	-22
57b-8	-25	58b-8	-1	59b-8	-14	60b-8	-18
57b-9	-16	58b-9	-20	59b-9	-20	60b-9	-11
57b-10	-19	58b-10	-27	59b-10	-17	60b-10	-5
57b-11	-9	58b-11	-20	59b-11	-5	60b-11	-7
57b-12	-14	58b-12	-21	59b-12	-19	60b-12	-2

61a-1	5	62a-1	-2	63a-1	1	64a-1	9
61a-2	-10	62a-2	12	63a-2	-2	64a-2	6
61a-3	-1	62a-3	2	63a-3	-15	64a-3	-6
61a-4	4	62a-4	-8	63a-4	-4	64a-4	-1
61a-5	16	62a-5	4	63a-5	9	64a-5	2
61a-6	-5	62a-6	-13	63a-6	-7	64a-6	19
61a-7	12	62a-7	12	63a-7	12	64a-7	6
61a-8	22	62a-8	9	63a-8	21	64a-8	17
61a-9	10	62a-9	9	63a-9	3	64a-9	-2
61a-10	15	62a-10	-16	63a-10	-21	64a-10	-7
61a-11	-14	62a-11	12	63a-11	-8	64a-11	-7
61a-12	6	62a-12	0	63a-12	-7	64a-12	-18
61b-1	3	62b-1	-2	63b-1	-7	64b-1	6
61b-2	1	62b-2	-11	63b-2	-9	64b-2	-14
61b-3	-3	62b-3	4	63b-3	-13	64b-3	-11
61b-4	-19	62b-4	22	63b-4	2	64b-4	11
61b-5	15	62b-5	-4	63b-5	21	64b-5	-1
61b-6	8	62b-6	4	63b-6	10	64b-6	3
61b-7	-7	62b-7	-2	63b-7	-8	64b-7	5
61b-8	0	62b-8	15	63b-8	14	64b-8	14
61b-9	-9	62b-9	16	63b-9	2	64b-9	13
61b-10	0	62b-10	-18	63b-10	-7	64b-10	5
61b-11	-4	62b-11	-5	63b-11	-9	64b-11	0
61b-12	-4	62b-12	-5	63b-12	7	64b-12	-6

65a-1	-17	66a-1	6	67a-1	-27	68a-1	-15
65a-2	12	66a-2	-13	67a-2	31	68a-2	32
65a-3	9	66a-3	-2	67a-3	-16	68a-3	0
65a-4	12	66a-4	-15	67a-4	-24	68a-4	1
65a-5	21	66a-5	1	67a-5	-2	68a-5	-19
65a-6	-5	66a-6	-12	67a-6	18	68a-6	-11
65a-7	6	66a-7	-18	67a-7	-20	68a-7	10
65a-8	3	66a-8	14	67a-8	-13	68a-8	-14
65a-9	1	66a-9	6	67a-9	-2	68a-9	-1
65a-10	-6	66a-10	-10	67a-10	17	68a-10	-5
65a-11	-11	66a-11	-11	67a-11	10	68a-11	2
65a-12	13	66a-12	-20	67a-12	-8	68a-12	13
65b-1	1	66b-1	-19	67b-1	12	68b-1	5
65b-2	-13	66b-2	19	67b-2	-1	68b-2	16
65b-3	-1	66b-3	2	67b-3	-3	68b-3	-31
65b-4	8	66b-4	-3	67b-4	-32	68b-4	-19
65b-5	3	66b-5	10	67b-5	12	68b-5	-5
65b-6	10	66b-6	5	67b-6	-1	68b-6	-30
65b-7	7	66b-7	-7	67b-7	-9	68b-7	32
65b-8	-6	66b-8	-2	67b-8	-24	68b-8	18
65b-9	-10	66b-9	3	67b-9	-10	68b-9	-18
65b-10	19	66b-10	-3	67b-10	9	68b-10	-11
65b-11	-1	66b-11	-7	67b-11	0	68b-11	-1
65b-12	-1	66b-12	-12	67b-12	21	68b-12	-12

69a-1	1	70a-1	14	71a-1	28	72a-1	6
69a-2	-37	70a-2	-21	71a-2	6	72a-2	11
69a-3	-10	70a-3	-33	71a-3	-11	72a-3	-40
69a-4	17	70a-4	11	71a-4	-20	72a-4	10
69a-5	-26	70a-5	8	71a-5	27	72a-5	24
69a-6	35	70a-6	-19	71a-6	-10	72a-6	-30
69a-7	0	70a-7	-3	71a-7	30	72a-7	-21
69a-8	-7	70a-8	-23	71a-8	15	72a-8	26
69a-9	-8	70a-9	9	71a-9	27	72a-9	-6
69a-10	-7	70a-10	-14	71a-10	-12	72a-10	1
69a-11	-3	70a-11	-31	71a-11	1	72a-11	-30
69a-12	-10	70a-12	-8	71a-12	20	72a-12	-26
69b-1	-7	70b-1	-12	71b-1	-15	72b-1	3
69b-2	0	70b-2	27	71b-2	0	72b-2	-2
69b-3	34	70b-3	-4	71b-3	5	72b-3	-2
69b-4	11	70b-4	2	71b-4	13	72b-4	-20
69b-5	5	70b-5	24	71b-5	11	72b-5	2
69b-6	-5	70b-6	-12	71b-6	14	72b-6	4
69b-7	-14	70b-7	-7	71b-7	-29	72b-7	29
69b-8	10	70b-8	12	71b-8	17	72b-8	18
69b-9	8	70b-9	-26	71b-9	-24	72b-9	20
69b-10	-19	70b-10	-27	71b-10	16	72b-10	31
69b-11	25	70b-11	14	71b-11	12	72b-11	-17
69b-12	-16	70b-12	10	71b-12	-3	72b-12	-1

73a-1	0	74a-1	-52	75a-1	25	76a-1	15
73a-2	0	74a-2	13	75a-2	-31	76a-2	48
73a-3	16	74a-3	-21	75a-3	6	76a-3	-21
73a-4	22	74a-4	-30	75a-4	0	76a-4	-13
73a-5	41	74a-5	-31	75a-5	-20	76a-5	-20
73a-6	14	74a-6	-22	75a-6	5	76a-6	21
73a-7	50	74a-7	-10	75a-7	-4	76a-7	-13
73a-8	1	74a-8	20	75a-8	23	76a-8	5
73a-9	11	74a-9	23	75a-9	-16	76a-9	28
73a-10	12	74a-10	19	75a-10	14	76a-10	1
73a-11	37	74a-11	-44	75a-11	-41	76a-11	-34
73a-12	15	74a-12	-44	75a-12	22	76a-12	-30
73b-1	-22	74b-1	47	75b-1	-16	76b-1	-26
73b-2	6	74b-2	-34	75b-2	-11	76b-2	-32
73b-3	23	74b-3	-33	75b-3	4	76b-3	-12
73b-4	13	74b-4	44	75b-4	-8	76b-4	49
73b-5	-5	74b-5	28	75b-5	-3	76b-5	13
73b-6	25	74b-6	29	75b-6	8	76b-6	-10
73b-7	-4	74b-7	-16	75b-7	1	76b-7	17
73b-8	-19	74b-8	-6	75b-8	30	76b-8	17
73b-9	-19	74b-9	-8	75b-9	-57	76b-9	-37
73b-10	7	74b-10	-48	75b-10	-5	76b-10	-24
73b-11	-48	74b-11	-20	75b-11	-39	76b-11	-43
73b-12	23	74b-12	-19	75b-12	-6	76b-12	-10

77a-1	37	78a-1	-9	79a-1	5	80a-1	-40
77a-2	5	78a-2	-40	79a-2	-1	80a-2	12
77a-3	-18	78a-3	-46	79a-3	53	80a-3	21
77a-4	-17	78a-4	-11	79a-4	54	80a-4	-49
77a-5	48	78a-5	2	79a-5	-66	80a-5	-1
77a-6	32	78a-6	-8	79a-6	-14	80a-6	-57
77a-7	35	78a-7	-16	79a-7	-19	80a-7	-6
77a-8	5	78a-8	-39	79a-8	12	80a-8	60
77a-9	32	78a-9	-24	79a-9	38	80a-9	22
77a-10	-9	78a-10	4	79a-10	-41	80a-10	6
77a-11	-10	78a-11	-43	79a-11	4	80a-11	-66
77a-12	-19	78a-12	1	79a-12	46	80a-12	21
77b-1	-14	78b-1	-38	79b-1	17	80b-1	-1
77b-2	-6	78b-2	-32	79b-2	22	80b-2	-51
77b-3	-6	78b-3	16	79b-3	54	80b-3	-29
77b-4	11	78b-4	-33	79b-4	53	80b-4	-58
77b-5	3	78b-5	1	79b-5	-11	80b-5	31
77b-6	-1	78b-6	10	79b-6	21	80b-6	-14
77b-7	25	78b-7	16	79b-7	-55	80b-7	-24
77b-8	40	78b-8	24	79b-8	36	80b-8	52
77b-9	-36	78b-9	41	79b-9	-13	80b-9	-7
77b-10	-29	78b-10	-24	79b-10	38	80b-10	-6
77b-11	-13	78b-11	25	79b-11	-16	80b-11	-46
77b-12	30	78b-12	26	79b-12	53	80b-12	17

81a-1	-30	82a-1	-61	83a-1	-36	84a-1	17
81a-2	15	82a-2	26	83a-2	21	84a-2	31
81a-3	24	82a-3	45	83a-3	-1	84a-3	16
81a-4	6	82a-4	32	83a-4	-71	84a-4	-4
81a-5	58	82a-5	19	83a-5	-15	84a-5	3
81a-6	-23	82a-6	37	83a-6	-20	84a-6	59
81a-7	-34	82a-7	-42	83a-7	28	84a-7	-6
81a-8	-62	82a-8	-32	83a-8	-19	84a-8	2
81a-9	-14	82a-9	70	83a-9	-25	84a-9	0
81a-10	40	82a-10	-53	83a-10	0	84a-10	-2
81a-11	-19	82a-11	-1	83a-11	15	84a-11	-28
81a-12	-62	82a-12	6	83a-12	30	84a-12	26
81b-1	65	82b-1	13	83b-1	-18	84b-1	-24
81b-2	51	82b-2	19	83b-2	-50	84b-2	-49
81b-3	-37	82b-3	25	83b-3	35	84b-3	10
81b-4	44	82b-4	-19	83b-4	-10	84b-4	41
81b-5	-19	82b-5	-44	83b-5	-14	84b-5	-49
81b-6	-31	82b-6	61	83b-6	-25	84b-6	-17
81b-7	-6	82b-7	45	83b-7	24	84b-7	39
81b-8	-14	82b-8	24	83b-8	71	84b-8	2
81b-9	-7	82b-9	23	83b-9	33	84b-9	-61
81b-10	-34	82b-10	2	83b-10	17	84b-10	-30
81b-11	-18	82b-11	-18	83b-11	51	84b-11	-2
81b-12	-13	82b-12	52	83b-12	-10	84b-12	43

85a-1	44	86a-1	-53	87a-1	-1	88a-1	-23
85a-2	56	86a-2	-19	87a-2	76	88a-2	8
85a-3	-36	86a-3	56	87a-3	52	88a-3	-20
85a-4	-43	86a-4	11	87a-4	-7	88a-4	29
85a-5	31	86a-5	4	87a-5	16	88a-5	29
85a-6	5	86a-6	-3	87a-6	3	88a-6	30
85a-7	-1	86a-7	56	87a-7	11	88a-7	-71
85a-8	-34	86a-8	18	87a-8	14	88a-8	-16
85a-9	11	86a-9	-4	87a-9	25	88a-9	21
85a-10	-5	86a-10	0	87a-10	-32	88a-10	-12
85a-11	-21	86a-11	33	87a-11	-9	88a-11	-73
85a-12	37	86a-12	-8	87a-12	-8	88a-12	3
85b-1	-9	86b-1	-7	87b-1	35	88b-1	11
85b-2	-22	86b-2	64	87b-2	-26	88b-2	8
85b-3	5	86b-3	11	87b-3	19	88b-3	40
85b-4	40	86b-4	63	87b-4	-27	88b-4	-43
85b-5	3	86b-5	72	87b-5	-53	88b-5	-22
85b-6	42	86b-6	67	87b-6	-9	88b-6	13
85b-7	-3	86b-7	-7	87b-7	-8	88b-7	9
85b-8	40	86b-8	31	87b-8	17	88b-8	-36
85b-9	34	86b-9	8	87b-9	15	88b-9	17
85b-10	-1	86b-10	17	87b-10	-35	88b-10	-26
85b-11	-69	86b-11	39	87b-11	8	88b-11	-34
85b-12	37	86b-12	60	87b-12	0	88b-12	7

89a-1	-40	90a-1	-53
89a-2	7	90a-2	31
89a-3	-51	90a-3	28
89a-4	9	90a-4	11
89a-5	-67	90a-5	-33
89a-6	25	90a-6	-32
89a-7	-61	90a-7	-12
89a-8	-76	90a-8	49
89a-9	15	90a-9	-67
89a-10	-23	90a-10	-16
89a-11	47	90a-11	74
89a-12	4	90a-12	-63
89b-1	17	90b-1	6
89b-2	30	90b-2	-46
89b-3	60	90b-3	3
89b-4	4	90b-4	-3
89b-5	-73	90b-5	-47
89b-6	34	90b-6	-8
89b-7	-48	90b-7	-58
89b-8	3	90b-8	-12
89b-9	-7	90b-9	17
89b-10	36	90b-10	-7
89b-11	52	90b-11	-35
89b-12	7	90b-12	37