

CONTROLLER DOWN. BRAIN
TURBO ON.

Mission: Math Rally!

A go-kart. Lots of tens. And you at the wheel. Drive the route stop by stop!



Name _____

Date _____



Short on time? Express route (about 25 min): Stop 1 A+B → 2 A → 3 A → 5 (box 4) → 7 (case 1) → 8 (round A)

MENTAL MATH · MAKE A TEN

1 Ten Buddies

Two numbers that make 10 together are ten buddies. They help you jump over any ten in a flash.



A Who belongs together?

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

7 + = 10 4 + = 10 9 + = 10 2 + = 10

6 + = 10 8 + = 10 3 + = 10 5 + = 10

B Count on to the next ten

The ones need their ten buddy. $48 + 2 = 50$, because $8 + 2 = 10$.

48 + = 50 76 + = 80 33 + = 40 61 + = 70

85 + = 90 27 + = 30 54 + = 60 19 + = 20

C Split the number

5 = 2 + 7 = 4 + 8 = 3 + 9 = 5 +

☐ Stop 1 done

☆ Buddies found

ADDING ACROSS A TEN

2

Jump to the Ten

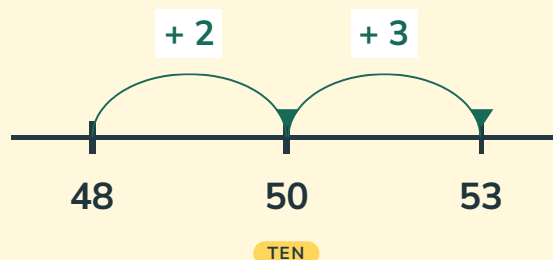
For $48 + 5$ you don't go in one go. You make a stop at the ten first.

**How the ten jump works**

1. Jump to the next ten ($48 + 2 = 50$).

2. Jump the rest ($50 + 3 = 53$).

To do this, split the 5: $5 = 2 + 3$.

**A With a stop at the ten**

a) $85 + 8 = 85 + \square + \square = \square$

c) $67 + 5 = 67 + \square + \square = \square$

e) $56 + 9 = 56 + \square + \square = \square$

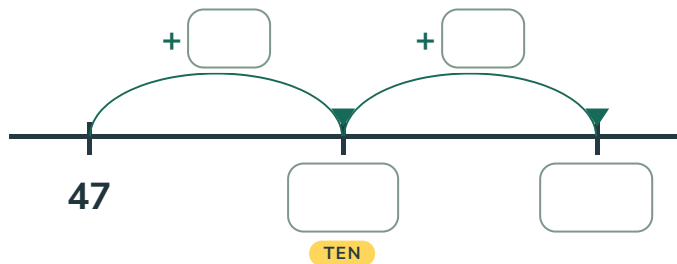
b) $78 + 4 = 78 + \square + \square = \square$

d) $39 + 7 = 39 + \square + \square = \square$

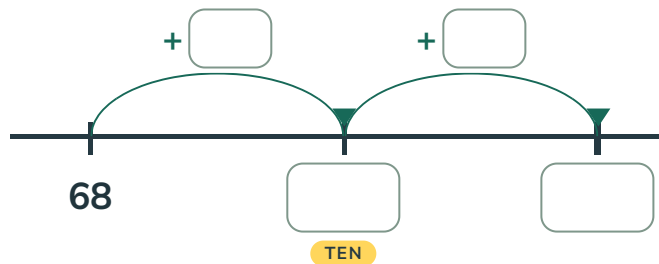
f) $26 + 8 = 26 + \square + \square = \square$

B On the number line

$47 + 6 = ?$



$68 + 5 = ?$

**C Now in your head**

$58 + 6 = \square$

$37 + 9 = \square$

$74 + 8 = \square$

$29 + 6 = \square$

$46 + 7 = \square$

$83 + 9 = \square$

$65 + 8 = \square$

$18 + 5 = \square$

$49 + 3 = \square$

$77 + 6 = \square$

$35 + 9 = \square$

$88 + 4 = \square$

☐ Stop 2 done

☆ Jump pro

SUBTRACTING ACROSS A TEN

3 Jump Back

With minus you jump backwards. The stop at the ten helps here too.

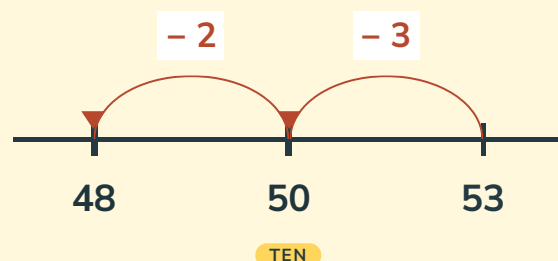


How the jump back works

1. Jump back to the ten ($53 - 3 = 50$).

2. Jump back the rest ($50 - 2 = 48$).

Split the 5: $5 = 3 + 2$.



A With a stop at the ten

a) $42 - 6 = 42 - \square - \square = \square$

b) $71 - 4 = 71 - \square - \square = \square$

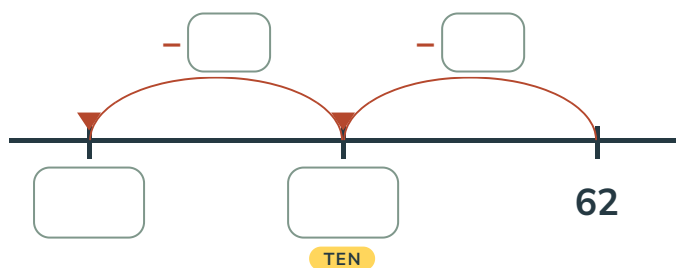
c) $64 - 7 = 64 - \square - \square = \square$

d) $35 - 8 = 35 - \square - \square = \square$

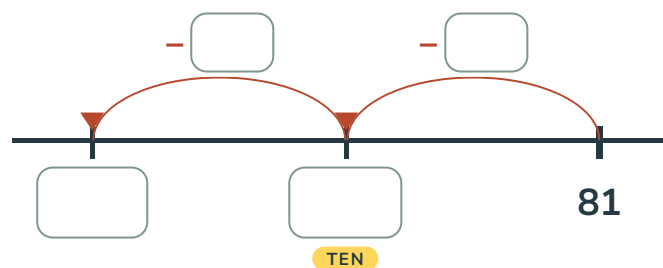
e) $93 - 5 = 93 - \square - \square = \square$

B On the number line (backwards)

$62 - 5 = ?$



$81 - 7 = ?$



C Now in your head

$91 - 3 = \square$

$54 - 8 = \square$

$33 - 6 = \square$

$82 - 7 = \square$

$45 - 9 = \square$

$76 - 8 = \square$

$61 - 5 = \square$

$27 - 9 = \square$

Check trick: Add back to check. $53 - 5 = 48$, because $48 + 5 = 53$.

☐ Stop 3 done

☆ Backwards ace

STRATEGIES FOR ADDING AND SUBTRACTING

4 Strategy Workshop

Build big problems from small steps. Three tools for your toolbox.

**A Step by step: tens first, then ones** $47 + 36$: $47 + 30 = 77 \rightarrow 77 + 6 = 83$

a) $47 + 36$: $47 + 30 = \boxed{} \rightarrow \dots + 6 = \boxed{}$

b) $29 + 45$: $29 + 40 = \boxed{} \rightarrow \dots + 5 = \boxed{}$

c) $56 + 28$: $56 + 20 = \boxed{} \rightarrow \dots + 8 = \boxed{}$

B Place value: tens + tens, ones + ones $47 + 36$: $40 + 30 = 70$, $7 + 6 = 13 \rightarrow 70 + 13 = 83$

a) $38 + 46$: $30 + 40 = \boxed{}$ $8 + 6 = \boxed{} \rightarrow$ together $\boxed{}$

b) $65 + 27$: $60 + 20 = \boxed{}$ $5 + 7 = \boxed{} \rightarrow$ together $\boxed{}$

C Subtract step by step

a) $83 - 36$: $83 - 30 = \boxed{} \rightarrow \dots - 6 = \boxed{}$

b) $72 - 45$: $72 - 40 = \boxed{} \rightarrow \dots - 5 = \boxed{}$

c) $91 - 58$: $91 - 50 = \boxed{} \rightarrow \dots - 8 = \boxed{}$

D Use a friendly number: the 9 trick

a) $46 + 9 = 46 + 10 - 1 = \boxed{}$

b) $73 - 9 = 73 - 10 + 1 = \boxed{}$

c) $38 + 19 = 38 + 20 - 1 = \boxed{}$

d) $85 - 19 = 85 - 20 + 1 = \boxed{}$

FIND THE PATTERN · FROG PATTERNS



5

Frog Patterns

The frog hops from problem to problem. What changes? Solve, write the next problem and choose.

A Solve, hop on, find the pattern

Below the dashed line, write the next problem. On the lines write: **+1, -1, +10, -10** or **stays the same**.

Box 1

$46 + 5 = \square$

$47 + 5 = \square$

$48 + 5 = \square$

$\square + \square = \square$

1st number always _____

2nd number always _____

Answer always _____

Box 2

$38 + 4 = \square$

$48 + 4 = \square$

$58 + 4 = \square$

$\square + \square = \square$

1st number always _____

2nd number always _____

Answer always _____

Box 3

$27 + 6 = \square$

$28 + 5 = \square$

$29 + 4 = \square$

$\square + \square = \square$

1st number always _____

2nd number always _____

Answer always _____

Box 4

$52 - 4 = \square$

$53 - 5 = \square$

$54 - 6 = \square$

$\square - \square = \square$

1st number always _____

2nd number always _____

Answer always _____

Box 5

$81 - 3 = \square$

$71 - 3 = \square$

$61 - 3 = \square$

$\square - \square = \square$

1st number always _____

2nd number always _____

Answer always _____

Box 6

$45 - 7 = \square$

$45 - 8 = \square$

$45 - 9 = \square$

$\square - \square = \square$

1st number always _____

2nd number always _____

Answer always _____

B Tricky: why?

In box 4 the answer is always 48. Explain why.

☐ Stop 5 done

Pattern frog

MULTIPLICATION AND DIVISION

6

Times Table Bakery

In the island bakery everything stands in neat rows. Perfect for multiplying!

**A How many cupcakes are on the tray?**

Look at the picture above: 3 rows, 4 cupcakes in each row.

$3 \times 4 = \boxed{}$

Turnaround fact: $4 \times 3 = \boxed{}$

B Multiplication blitz

$4 \times 6 = \boxed{}$

$7 \times 5 = \boxed{}$

$3 \times 8 = \boxed{}$

$9 \times 2 = \boxed{}$

$6 \times 6 = \boxed{}$

$8 \times 4 = \boxed{}$

$5 \times 9 = \boxed{}$

$7 \times 3 = \boxed{}$

C Division

$20 \div 4 = \boxed{}$

$35 \div 5 = \boxed{}$

$18 \div 3 = \boxed{}$

$24 \div 6 = \boxed{}$

$40 \div 8 = \boxed{}$

$27 \div 3 = \boxed{}$

D Fact families: three numbers, four facts

$3 \times 7 = \boxed{}$

$7 \times 3 = \boxed{}$

$21 \div 3 = \boxed{}$

$21 \div 7 = \boxed{}$



$5 \times 8 = \boxed{}$

$8 \times 5 = \boxed{}$

$40 \div 5 = \boxed{}$

$40 \div 8 = \boxed{}$

E Double and halve

double 14 = $\boxed{}$

double 25 = $\boxed{}$

double 37 = $\boxed{}$

double 48 = $\boxed{}$

half of 36 = $\boxed{}$

half of 50 = $\boxed{}$

half of 84 = $\boxed{}$

half of 70 = $\boxed{}$

☐ Stop 6 done

☆ Baker ace

WORD PROBLEMS

7

Detective Cases

Read carefully like a detective. What is the question? Then solve and answer with a sentence.



Detective plan

1. **Read:** What do I know? What is the question? 2. **N** = number sentence: number, sign, number, answer. 3. **A** = write an answer sentence.

Case 1

48 people are on the Wobbly bus. At the stop, 7 more people get on. How many people are on the bus now?

N =

A _____

Case 2

Pixel has 63 coins. She buys an ice cream for 6 coins. How many coins does she have left?

N =

A _____

Case 3

Wobbi packs 4 parcels. Each parcel gets 5 balls. How many balls are there in all?

N =

A _____

Case 4

Pro: The fishing boat catches 36 fish in the morning and 27 fish in the afternoon. Wobbi lets 9 fish go. How many fish are left?

N =
 =

A _____

MENTAL MATH LIKE A TEST · 10 PROBLEMS



8

Lightning Rally

Each round has 10 problems, like a mental math quiz. Do one round a day and watch yourself get better!

How it works: Round A without a timer: think of the ten jump for every problem. From round B on you can time yourself (goal: 3 minutes). Then compare with the answer key and write how many you got right.

Round A

Date: _____

$28 + 4 =$

$58 + 4 =$

$17 - 8 =$

$71 - 8 =$

$65 + 8 =$

$39 + 7 =$

$34 + 8 =$

$32 - 5 =$

$52 + 9 =$

$14 + 8 =$

I got _____ out of 10 right.

Round B

Date: _____

$84 - 8 =$

$63 + 9 =$

$89 + 3 =$

$15 + 8 =$

$75 - 8 =$

$36 - 7 =$

$14 + 7 =$

$24 + 8 =$

$64 + 8 =$

$28 + 3 =$

I got _____ out of 10 right.

Round C

Date: _____

$67 + 7 =$

$18 + 4 =$

$17 + 6 =$

$15 - 7 =$

$83 + 8 =$

$28 - 9 =$

$79 + 7 =$

$68 + 7 =$

$49 + 8 =$

$21 - 3 =$

I got _____ out of 10 right.

Color in a star for every round with 8 or more right: ☆ ☆ ☆

☐ Stop 8 done

☒ Rally champion