



Learn a new puzzle

Hit the Target

Work out the parentheses first, then $\times$ and $\div$, then $+$ and $-$.

Trick: **Parentheses first**

1

$$2 + 3 \times 4 - 1 = \boxed{19}$$

Without parentheses: $2 + 3 \times 4 - 1 = 2 + 12 - 1 = 13$.
Not 19.

2

$$2 + (3 \times 4) - 1 = \boxed{19}$$

$2 + (3 \times 4) - 1$ is still 13: $\times$ goes first anyway.
Parentheses around $\times$ change nothing.

3

$$(2 + 3) \times 4 - 1 = \boxed{19}$$

$(2 + 3) \times 4 - 1 = 5 \times 4 - 1 = 19$. Hit!

Try it

^a $3 \bigcirc 9 \bigcirc (8 \bigcirc 2) = \boxed{57}$

^b $2 \bigcirc (3 \bigcirc 9 \bigcirc 2) = \boxed{58}$

^c $8 \bigcirc (6 \bigcirc 5) \bigcirc 5 = \boxed{40}$

The answer is with the other answers.

Talk about it: Ask: Where would parentheses make the biggest change?



- ① **Hit the Target** Write + – or × in each circle to hit the target. Work out the parentheses first.



^a $(9 \bigcirc 8) \bigcirc 5 \bigcirc 4 = \boxed{20}$

^b $2 \bigcirc 4 \bigcirc (6 \bigcirc 5) = \boxed{6}$

^c $4 \bigcirc 9 \bigcirc (9 \bigcirc 5) = \boxed{9}$

- ② **Hit the Target** Write + – or × in each circle to hit the target. Work out the parentheses first.



^a $(5 \bigcirc 7) \bigcirc 4 \bigcirc 5 = \boxed{43}$

^b $4 \bigcirc (9 \bigcirc 5) \bigcirc 2 = \boxed{2}$

^c $8 \bigcirc (7 \bigcirc 6) \bigcirc 8 = \boxed{64}$

- ③ **Hit the Target** Write + – or × in each circle to hit the target. Work out the parentheses first.



^a $(2 \bigcirc 3) \bigcirc 4 \bigcirc 2 = \boxed{40}$

^b $2 \bigcirc 5 \bigcirc (8 \bigcirc 8) = \boxed{82}$

^c $(9 \bigcirc 3) \bigcirc 2 \bigcirc 2 = \boxed{48}$



- ④ **Hit the Target** Write + – or × in each circle to hit the target. Work out the parentheses first.



$$^a \quad 6 \bigcirc (8 \bigcirc 4 \bigcirc 8) = \boxed{2}$$

$$^b \quad (3 \bigcirc 3) \bigcirc 5 \bigcirc 5 = \boxed{5}$$

$$^c \quad 9 \bigcirc 5 \bigcirc (4 \bigcirc 3) = \boxed{38}$$

- ⑤ **Hit the Target** Add one pair of parentheses to make it true.



$$^a \quad 1 \div 3 + 2 - 4 = \boxed{1}$$

$$^b \quad 8 \times 8 - 3 \div 2 = \boxed{20}$$

$$^c \quad 5 + 1 \times 4 + 8 = \boxed{32}$$

- ⑥ **Hit the Target** Add one pair of parentheses to make it true.



$$^a \quad 8 \div 8 \div 8 + 7 = \boxed{1}$$

$$^b \quad 4 + 1 \times 4 \div 2 = \boxed{10}$$

$$^c \quad 7 + 9 - 3 \div 2 = \boxed{10}$$



7 Hit the Target Add one pair of parentheses to make it true.



^a $7 + 3 \times 5 + 9 = \boxed{59}$

^b $6 + 2 \times 5 + 6 = \boxed{28}$

^c $2 \times 7 + 5 + 8 = \boxed{32}$

8 Hit the Target Use each number once to make the target. Write it on one line; use parentheses.



^a Use $\boxed{5} \boxed{6} \boxed{7} \boxed{7}$ to make $\boxed{20}$

^b Use $\boxed{3} \boxed{4} \boxed{7} \boxed{8}$ to make $\boxed{32}$

**9****Hit the Target**

Use each number once to make the target. Write it on one line; use parentheses.



^a Use

1

3

7

10

 to make

80

^b Use

1

2

5

8

 to make

46

10**Hit the Target**

Find two different ways to make the target. Write each on one line.



^a Use

2

4

8

11

 to make

66

Way 1 _____

Way 2 _____

Other ways are right too if the math is right and each number is used once.



Answers

 For grown-ups. Cut off or keep this page aside until the puzzles are done.**Learn · Hit the Target**

$$^a 3 (+) 9 (\times) (8 (-) 2) = \boxed{57}$$

$$^b 2 (\times) (3 (\times) 9 (+) 2) = \boxed{58}$$

$$^c 8 (\times) (6 (-) 5) (\times) 5 = \boxed{40}$$

#1

$$^a (9 (-) 8) (\times) 5 (\times) 4 = \boxed{20}$$

$$^b 2 (+) 4 (\times) (6 (-) 5) = \boxed{6}$$

$$^c 4 (+) 9 (-) (9 (-) 5) = \boxed{9}$$

a: $(9 - 8) \times 5 \times 4 = 20$. b: $2 + 4 \times (6 - 5) = 6$. c: $4 + 9 - (9 - 5) = 9$.

#2

$$^a (5 (+) 7) (\times) 4 (-) 5 = \boxed{43}$$

$$^b 4 (-) (9 (-) 5) (+) 2 = \boxed{2}$$

$$^c 8 (\times) (7 (-) 6) (\times) 8 = \boxed{64}$$

a: $(5 + 7) \times 4 - 5 = 43$. b: $4 - (9 - 5) + 2 = 2$. c: $8 \times (7 - 6) \times 8 = 64$.

#3

$$^a (2 (+) 3) (\times) 4 (\times) 2 = \boxed{40}$$

$$^b 2 (+) 5 (\times) (8 (+) 8) = \boxed{82}$$

$$^c (9 (+) 3) (\times) 2 (\times) 2 = \boxed{48}$$

a: $(2 + 3) \times 4 \times 2 = 40$. b: $2 + 5 \times (8 + 8) = 82$. c: $(9 + 3) \times 2 \times 2 = 48$.

#4

$$^a 6 (-) (8 (+) 4 (-) 8) = \boxed{2}$$

$$^b (3 (-) 3) (\times) 5 (+) 5 = \boxed{5}$$

$$^c 9 (\times) 5 (-) (4 (+) 3) = \boxed{38}$$

a: $6 - (8 + 4 - 8) = 2$. b: $(3 - 3) \times 5 + 5 = 5$. c: $9 \times 5 - (4 + 3) = 38$.

#5

$$^a 1 \div (3 + 2 - 4) = \boxed{1}$$

$$^b 8 \times (8 - 3) \div 2 = \boxed{20}$$

$$^c (5 + 1) \times 4 + 8 = \boxed{32}$$

a: $1 \div (3 + 2 - 4) = 1$. b: $8 \times (8 - 3) \div 2 = 20$. c: $(5 + 1) \times 4 + 8 = 32$.

#6

$$^a 8 \div (8 \div 8 + 7) = \boxed{1}$$

$$^b (4 + 1) \times 4 \div 2 = \boxed{10}$$

$$^c 7 + (9 - 3) \div 2 = \boxed{10}$$

a: $8 \div (8 \div 8 + 7) = 1$. b: $(4 + 1) \times 4 \div 2 = 10$. c: $7 + (9 - 3) \div 2 = 10$.

#7

$$^a (7 + 3) \times 5 + 9 = \boxed{59}$$

$$^b 6 + 2 \times (5 + 6) = \boxed{28}$$

$$^c 2 \times (7 + 5) + 8 = \boxed{32}$$

a: $(7 + 3) \times 5 + 9 = 59$. b: $6 + 2 \times (5 + 6) = 28$. c: $2 \times (7 + 5) + 8 = 32$.

#8

$$^a \text{ Use } \boxed{5} \boxed{6} \boxed{7} \boxed{7} \text{ to make } \boxed{20}$$

$$6 + 7 \times (7 - 5) = 20$$

$$^b \text{ Use } \boxed{3} \boxed{4} \boxed{7} \boxed{8} \text{ to make } \boxed{32}$$

$$4 \times (3 + 7) - 8 = 32$$

a: $6 + 7 \times (7 - 5) = 20$. b: $4 \times (3 + 7) - 8 = 32$.



Answers For grown-ups. Cut off or keep this page aside until the puzzles are done.

#9

^a Use **1** **3** **7** **10** to make **80**

$3 + 7 \times (1 + 10) = 80$ -----

^b Use **1** **2** **5** **8** to make **46**

$8 \times (1 + 5) - 2 = 46$ -----

a: $3 + 7 \times (1 + 10) = 80$. b: $8 \times (1 + 5) - 2 = 46$.

#10

^a Use **2** **4** **8** **11** to make **66**

Way 1 $11 \times (2 + 8 - 4) = 66$ -----

Way 2 $11 \times (4 + 8) \div 2 = 66$ -----

Way 1: $11 \times (2 + 8 - 4) = 66$. Way 2: $11 \times (4 + 8) \div 2 = 66$. Other ways are right too if the math is right and each number is used once.