

Name: _____

Date: _____

2-step backtracking: Answers

(1)

x
=
63

 $\xrightarrow{-3}$

$x - 3$
=
60

 $\xrightarrow{\div 10}$

$\frac{(x-3)}{10}$
=
6

$\xleftarrow{+3}$ $\xleftarrow{\times 10}$

(6)

x
=
18

 $\xrightarrow{\div 2}$

$\frac{x}{2}$
=
9

 $\xrightarrow{+5}$

$\frac{x}{2} + 5$
=
14

$\xleftarrow{\times 2}$ $\xleftarrow{-5}$

(2)

x
=
25

 $\xrightarrow{\div 5}$

$\frac{x}{5}$
=
5

 $\xrightarrow{+5}$

$\frac{x}{5} + 5$
=
10

$\xleftarrow{\times 5}$ $\xleftarrow{-5}$

(7)

x
=
1

 $\xrightarrow{+1}$

$x + 1$
=
2

 $\xrightarrow{\div 2}$

$\frac{(x+1)}{2}$
=
1

$\xleftarrow{-1}$ $\xleftarrow{\times 2}$

(3)

x
=
8

 $\xrightarrow{-3}$

$x - 3$
=
5

 $\xrightarrow{\times 5}$

$5(x - 3)$
=
25

$\xleftarrow{+3}$ $\xleftarrow{\div 5}$

(8)

x
=
24

 $\xrightarrow{\div 2}$

$\frac{x}{2}$
=
12

 $\xrightarrow{-5}$

$\frac{x}{2} - 5$
=
7

$\xleftarrow{\times 2}$ $\xleftarrow{+5}$

(4)

x
=
106

 $\xrightarrow{-6}$

$x - 6$
=
100

 $\xrightarrow{\div 10}$

$\frac{(x-6)}{10}$
=
10

$\xleftarrow{+6}$ $\xleftarrow{\times 10}$

(9)

x
=
26

 $\xrightarrow{+4}$

$x + 4$
=
30

 $\xrightarrow{\div 10}$

$\frac{(x+4)}{10}$
=
3

$\xleftarrow{-4}$ $\xleftarrow{\times 10}$

(5)

x
=
80

 $\xrightarrow{\div 8}$

$\frac{x}{8}$
=
10

 $\xrightarrow{-7}$

$\frac{x}{8} - 7$
=
3

$\xleftarrow{\times 8}$ $\xleftarrow{+7}$

(10)

x
=
45

 $\xrightarrow{+9}$

$x + 9$
=
54

 $\xrightarrow{\div 9}$

$\frac{(x+9)}{9}$
=
6

$\xleftarrow{-9}$ $\xleftarrow{\times 9}$

(11)

x
=
12

 $\xrightarrow{-6}$

$x - 6$
=
6

 $\xrightarrow{\times 8}$

$8(x - 6)$
=
48

$\xleftarrow{+6} \quad \xleftarrow{\div 8}$

(16)

x
=
144

 $\xrightarrow{\div 8}$

$\frac{x}{8}$
=
18

 $\xrightarrow{-8}$

$\frac{x}{8} - 8$
=
10

$\xleftarrow{\times 8} \quad \xleftarrow{+8}$

(12)

x
=
0

 $\xrightarrow{+4}$

$x + 4$
=
4

 $\xrightarrow{\div 4}$

$\frac{(x+4)}{4}$
=
1

$\xleftarrow{-4} \quad \xleftarrow{\times 4}$

(17)

x
=
9

 $\xrightarrow{\times 8}$

$8x$
=
72

 $\xrightarrow{-7}$

$8x - 7$
=
65

$\xleftarrow{\div 8} \quad \xleftarrow{+7}$

(13)

x
=
9

 $\xrightarrow{+6}$

$x + 6$
=
15

 $\xrightarrow{\times 3}$

$3(x + 6)$
=
45

$\xleftarrow{-6} \quad \xleftarrow{\div 3}$

(18)

x
=
4

 $\xrightarrow{+6}$

$x + 6$
=
10

 $\xrightarrow{\times 2}$

$2(x + 6)$
=
20

$\xleftarrow{-6} \quad \xleftarrow{\div 2}$

(14)

x
=
6

 $\xrightarrow{+5}$

$x + 5$
=
11

 $\xrightarrow{\times 9}$

$9(x + 5)$
=
99

$\xleftarrow{-5} \quad \xleftarrow{\div 9}$

(19)

x
=
8

 $\xrightarrow{+1}$

$x + 1$
=
9

 $\xrightarrow{\div 9}$

$\frac{(x+1)}{9}$
=
1

$\xleftarrow{-1} \quad \xleftarrow{\times 9}$

(15)

x
=
2

 $\xrightarrow{+7}$

$x + 7$
=
9

 $\xrightarrow{\times 2}$

$2(x + 7)$
=
18

$\xleftarrow{-7} \quad \xleftarrow{\div 2}$

(20)

x
=
3

 $\xrightarrow{+7}$

$x + 7$
=
10

 $\xrightarrow{\times 8}$

$8(x + 7)$
=
80

$\xleftarrow{-7} \quad \xleftarrow{\div 8}$