

Name: _____

Date: _____

2-step backtracking: Answers

(1)

x
=
80

 $\xrightarrow{+10}$

$x + 10$
=
90

 $\xrightarrow{\div 10}$

$\frac{(x+10)}{10}$
=
9

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

(6)

x
=
4

 $\xrightarrow{+6}$

$x + 6$
=
10

 $\xrightarrow{\times 10}$

$10(x + 6)$
=
100

$\xleftarrow{-6} \quad \xleftarrow{\div 10}$

(2)

x
=
30

 $\xrightarrow{\div 6}$

$\frac{x}{6}$
=
5

 $\xrightarrow{+10}$

$\frac{x}{6} + 10$
=
15

$\xleftarrow{\times 6} \quad \xleftarrow{-10}$

(7)

x
=
3

 $\xrightarrow{\times 3}$

$3x$
=
9

 $\xrightarrow{+8}$

$3x + 8$
=
17

$\xleftarrow{\div 3} \quad \xleftarrow{-8}$

(3)

x
=
3

 $\xrightarrow{+5}$

$x + 5$
=
8

 $\xrightarrow{\times 5}$

$5(x + 5)$
=
40

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

(8)

x
=
12

 $\xrightarrow{-5}$

$x - 5$
=
7

 $\xrightarrow{\times 7}$

$7(x - 5)$
=
49

$\xleftarrow{+5} \quad \xleftarrow{\div 7}$

(4)

x
=
108

 $\xrightarrow{\div 9}$

$\frac{x}{9}$
=
12

 $\xrightarrow{-2}$

$\frac{x}{9} - 2$
=
10

$\xleftarrow{\times 9} \quad \xleftarrow{+2}$

(9)

x
=
150

 $\xrightarrow{\div 10}$

$\frac{x}{10}$
=
15

 $\xrightarrow{-6}$

$\frac{x}{10} - 6$
=
9

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

(5)

x
=
39

 $\xrightarrow{\div 3}$

$\frac{x}{3}$
=
13

 $\xrightarrow{-8}$

$\frac{x}{3} - 8$
=
5

$\xleftarrow{\times 3} \quad \xleftarrow{+8}$

(10)

x
=
2

 $\xrightarrow{+4}$

$x + 4$
=
6

 $\xrightarrow{\times 10}$

$10(x + 4)$
=
60

$\xleftarrow{-4} \quad \xleftarrow{\div 10}$

(11)

x
=
24

 $\xrightarrow{-4}$

$x - 4$
=
20

 $\xrightarrow{\div 10}$

$\frac{(x-4)}{10}$
=
2

$\xleftarrow{+4} \quad \xleftarrow{\times 10}$

(16)

x
=
4

 $\xrightarrow{+1}$

$x + 1$
=
5

 $\xrightarrow{\times 6}$

$6(x + 1)$
=
30

$\xleftarrow{-1} \quad \xleftarrow{\div 6}$

(12)

x
=
2

 $\xrightarrow{\times 6}$

$6x$
=
12

 $\xrightarrow{+5}$

$6x + 5$
=
17

$\xleftarrow{\div 6} \quad \xleftarrow{-5}$

(17)

x
=
2

 $\xrightarrow{\times 9}$

$9x$
=
18

 $\xrightarrow{-2}$

$9x - 2$
=
16

$\xleftarrow{\div 9} \quad \xleftarrow{+2}$

(13)

x
=
12

 $\xrightarrow{-4}$

$x - 4$
=
8

 $\xrightarrow{\div 8}$

$\frac{(x-4)}{8}$
=
1

$\xleftarrow{+4} \quad \xleftarrow{\times 8}$

(18)

x
=
13

 $\xrightarrow{-5}$

$x - 5$
=
8

 $\xrightarrow{\times 6}$

$6(x - 5)$
=
48

$\xleftarrow{+5} \quad \xleftarrow{\div 6}$

(14)

x
=
4

 $\xrightarrow{\times 5}$

$5x$
=
20

 $\xrightarrow{-5}$

$5x - 5$
=
15

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

(19)

x
=
6

 $\xrightarrow{\times 5}$

$5x$
=
30

 $\xrightarrow{-2}$

$5x - 2$
=
28

$\xleftarrow{\div 5} \quad \xleftarrow{+2}$

(15)

x
=
9

 $\xrightarrow{-7}$

$x - 7$
=
2

 $\xrightarrow{\div 2}$

$\frac{(x-7)}{2}$
=
1

$\xleftarrow{+7} \quad \xleftarrow{\times 2}$

(20)

x
=
6

 $\xrightarrow{+5}$

$x + 5$
=
11

 $\xrightarrow{\times 2}$

$2(x + 5)$
=
22

$\xleftarrow{-5} \quad \xleftarrow{\div 2}$