

Name: \_\_\_\_\_

Date: \_\_\_\_\_

2-step backtracking: Answers

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(1)

$x$
=
4

 $\xrightarrow{+4}$ 

$x + 4$
=
8

 $\xrightarrow{\times 1}$ 

$1(x + 4)$
=
8

$\xleftarrow{-4}$        $\xleftarrow{\div 1}$

(6)

$x$
=
10

 $\xrightarrow{+8}$ 

$x + 8$
=
18

 $\xrightarrow{\times 7}$ 

$7(x + 8)$
=
126

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

(2)

$x$
=
1

 $\xrightarrow{+3}$ 

$x + 3$
=
4

 $\xrightarrow{\times 1}$ 

$1(x + 3)$
=
4

$\xleftarrow{-3}$        $\xleftarrow{\div 1}$

(7)

$x$
=
5

 $\xrightarrow{+1}$ 

$x + 1$
=
6

 $\xrightarrow{\times 8}$ 

$8(x + 1)$
=
48

$\xleftarrow{-1}$        $\xleftarrow{\div 8}$

(3)

$x$
=
10

 $\xrightarrow{+6}$ 

$x + 6$
=
16

 $\xrightarrow{\times 4}$ 

$4(x + 6)$
=
64

$\xleftarrow{-6}$        $\xleftarrow{\div 4}$

(8)

$x$
=
6

 $\xrightarrow{+1}$ 

$x + 1$
=
7

 $\xrightarrow{\times 3}$ 

$3(x + 1)$
=
21

$\xleftarrow{-1}$        $\xleftarrow{\div 3}$

(4)

$x$
=
5

 $\xrightarrow{+7}$ 

$x + 7$
=
12

 $\xrightarrow{\times 10}$ 

$10(x + 7)$
=
120

$\xleftarrow{-7}$        $\xleftarrow{\div 10}$

(9)

$x$
=
8

 $\xrightarrow{+9}$ 

$x + 9$
=
17

 $\xrightarrow{\times 7}$ 

$7(x + 9)$
=
119

$\xleftarrow{-9}$        $\xleftarrow{\div 7}$

(5)

$x$
=
6

 $\xrightarrow{+7}$ 

$x + 7$
=
13

 $\xrightarrow{\times 9}$ 

$9(x + 7)$
=
117

$\xleftarrow{-7}$        $\xleftarrow{\div 9}$

(10)

$x$
=
2

 $\xrightarrow{+8}$ 

$x + 8$
=
10

 $\xrightarrow{\times 10}$ 

$10(x + 8)$
=
100

$\xleftarrow{-8}$        $\xleftarrow{\div 10}$

(11)

$x$
=
10

 $\xrightarrow{+8}$ 

$x + 8$
=
18

 $\xrightarrow{\times 2}$ 

$2(x + 8)$
=
36

$\xleftarrow{-8} \quad \xleftarrow{\div 2}$

(16)

$x$
=
6

 $\xrightarrow{+9}$ 

$x + 9$
=
15

 $\xrightarrow{\times 7}$ 

$7(x + 9)$
=
105

$\xleftarrow{-9} \quad \xleftarrow{\div 7}$

(12)

$x$
=
1

 $\xrightarrow{+2}$ 

$x + 2$
=
3

 $\xrightarrow{\times 6}$ 

$6(x + 2)$
=
18

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

(17)

$x$
=
4

 $\xrightarrow{+2}$ 

$x + 2$
=
6

 $\xrightarrow{\times 3}$ 

$3(x + 2)$
=
18

$\xleftarrow{-2} \quad \xleftarrow{\div 3}$

(13)

$x$
=
4

 $\xrightarrow{+2}$ 

$x + 2$
=
6

 $\xrightarrow{\times 10}$ 

$10(x + 2)$
=
60

$\xleftarrow{-2} \quad \xleftarrow{\div 10}$

(18)

$x$
=
6

 $\xrightarrow{+10}$ 

$x + 10$
=
16

 $\xrightarrow{\times 8}$ 

$8(x + 10)$
=
128

$\xleftarrow{-10} \quad \xleftarrow{\div 8}$

(14)

$x$
=
8

 $\xrightarrow{+5}$ 

$x + 5$
=
13

 $\xrightarrow{\times 2}$ 

$2(x + 5)$
=
26

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

(19)

$x$
=
4

 $\xrightarrow{+9}$ 

$x + 9$
=
13

 $\xrightarrow{\times 8}$ 

$8(x + 9)$
=
104

$\xleftarrow{-9} \quad \xleftarrow{\div 8}$

(15)

$x$
=
1

 $\xrightarrow{+2}$ 

$x + 2$
=
3

 $\xrightarrow{\times 1}$ 

$1(x + 2)$
=
3

$\xleftarrow{-2} \quad \xleftarrow{\div 1}$

(20)

$x$
=
7

 $\xrightarrow{+9}$ 

$x + 9$
=
16

 $\xrightarrow{\times 2}$ 

$2(x + 9)$
=
32

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