

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

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

2-step backtracking: Answers

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(1)

$x$
=
6

 $\xrightarrow{\div 2}$ 

$\frac{x}{2}$
=
3

 $\xrightarrow{+1}$ 

$\frac{x}{2} + 1$
=
4

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

(6)

$x$
=
42

 $\xrightarrow{\div 6}$ 

$\frac{x}{6}$
=
7

 $\xrightarrow{+10}$ 

$\frac{x}{6} + 10$
=
17

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

(2)

$x$
=
45

 $\xrightarrow{\div 9}$ 

$\frac{x}{9}$
=
5

 $\xrightarrow{+4}$ 

$\frac{x}{9} + 4$
=
9

$\xleftarrow{\times 9}$        $\xleftarrow{-4}$

(7)

$x$
=
50

 $\xrightarrow{\div 5}$ 

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

 $\xrightarrow{+3}$ 

$\frac{x}{5} + 3$
=
13

$\xleftarrow{\times 5}$        $\xleftarrow{-3}$

(3)

$x$
=
63

 $\xrightarrow{\div 7}$ 

$\frac{x}{7}$
=
9

 $\xrightarrow{+4}$ 

$\frac{x}{7} + 4$
=
13

$\xleftarrow{\times 7}$        $\xleftarrow{-4}$

(8)

$x$
=
20

 $\xrightarrow{\div 4}$ 

$\frac{x}{4}$
=
5

 $\xrightarrow{+4}$ 

$\frac{x}{4} + 4$
=
9

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

(4)

$x$
=
16

 $\xrightarrow{\div 4}$ 

$\frac{x}{4}$
=
4

 $\xrightarrow{+5}$ 

$\frac{x}{4} + 5$
=
9

$\xleftarrow{\times 4}$        $\xleftarrow{-5}$

(9)

$x$
=
63

 $\xrightarrow{\div 7}$ 

$\frac{x}{7}$
=
9

 $\xrightarrow{+4}$ 

$\frac{x}{7} + 4$
=
13

$\xleftarrow{\times 7}$        $\xleftarrow{-4}$

(5)

$x$
=
45

 $\xrightarrow{\div 5}$ 

$\frac{x}{5}$
=
9

 $\xrightarrow{+1}$ 

$\frac{x}{5} + 1$
=
10

$\xleftarrow{\times 5}$        $\xleftarrow{-1}$

(10)

$x$
=
40

 $\xrightarrow{\div 10}$ 

$\frac{x}{10}$
=
4

 $\xrightarrow{+4}$ 

$\frac{x}{10} + 4$
=
8

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

(11)

$x$
=
20

 $\xrightarrow{\div 2}$ 

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

 $\xrightarrow{+8}$ 

$\frac{x}{2} + 8$
=
18

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

(16)

$x$
=
18

 $\xrightarrow{\div 9}$ 

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

 $\xrightarrow{+10}$ 

$\frac{x}{9} + 10$
=
12

$\xleftarrow{\times 9} \quad \xleftarrow{-10}$

(12)

$x$
=
16

 $\xrightarrow{\div 4}$ 

$\frac{x}{4}$
=
4

 $\xrightarrow{+4}$ 

$\frac{x}{4} + 4$
=
8

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

(17)

$x$
=
72

 $\xrightarrow{\div 9}$ 

$\frac{x}{9}$
=
8

 $\xrightarrow{+2}$ 

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

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

(13)

$x$
=
28

 $\xrightarrow{\div 4}$ 

$\frac{x}{4}$
=
7

 $\xrightarrow{+4}$ 

$\frac{x}{4} + 4$
=
11

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

(18)

$x$
=
60

 $\xrightarrow{\div 10}$ 

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

 $\xrightarrow{+4}$ 

$\frac{x}{10} + 4$
=
10

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

(14)

$x$
=
50

 $\xrightarrow{\div 10}$ 

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

 $\xrightarrow{+3}$ 

$\frac{x}{10} + 3$
=
8

$\xleftarrow{\times 10} \quad \xleftarrow{-3}$

(19)

$x$
=
6

 $\xrightarrow{\div 6}$ 

$\frac{x}{6}$
=
1

 $\xrightarrow{+2}$ 

$\frac{x}{6} + 2$
=
3

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

(15)

$x$
=
100

 $\xrightarrow{\div 10}$ 

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

 $\xrightarrow{+2}$ 

$\frac{x}{10} + 2$
=
12

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

(20)

$x$
=
10

 $\xrightarrow{\div 2}$ 

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

 $\xrightarrow{+5}$ 

$\frac{x}{2} + 5$
=
10

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