

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

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

2-step backtracking: Answers

(1)

$x$
=
5

 $\xrightarrow{\times 8}$ 

$8x$
=
40

 $\xrightarrow{-10}$ 

$8x - 10$
=
30

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

(6)

$x$
=
41

 $\xrightarrow{-9}$ 

$x - 9$
=
32

 $\xrightarrow{\div 4}$ 

$\frac{(x-9)}{4}$
=
8

$\xleftarrow{+9} \quad \xleftarrow{\times 4}$

(2)

$x$
=
12

 $\xrightarrow{-9}$ 

$x - 9$
=
3

 $\xrightarrow{\times 7}$ 

$7(x - 9)$
=
21

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

(7)

$x$
=
30

 $\xrightarrow{+10}$ 

$x + 10$
=
40

 $\xrightarrow{\div 5}$ 

$\frac{(x+10)}{5}$
=
8

$\xleftarrow{-10} \quad \xleftarrow{\times 5}$

(3)

$x$
=
81

 $\xrightarrow{\div 9}$ 

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

 $\xrightarrow{-7}$ 

$\frac{x}{9} - 7$
=
2

$\xleftarrow{\times 9} \quad \xleftarrow{+7}$

(8)

$x$
=
8

 $\xrightarrow{\times 10}$ 

$10x$
=
80

 $\xrightarrow{+3}$ 

$10x + 3$
=
83

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

(4)

$x$
=
7

 $\xrightarrow{+3}$ 

$x + 3$
=
10

 $\xrightarrow{\times 2}$ 

$2(x + 3)$
=
20

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

(9)

$x$
=
4

 $\xrightarrow{+4}$ 

$x + 4$
=
8

 $\xrightarrow{\times 7}$ 

$7(x + 4)$
=
56

$\xleftarrow{-4} \quad \xleftarrow{\div 7}$

(5)

$x$
=
35

 $\xrightarrow{-8}$ 

$x - 8$
=
27

 $\xrightarrow{\div 9}$ 

$\frac{(x-8)}{9}$
=
3

$\xleftarrow{+8} \quad \xleftarrow{\times 9}$

(10)

$x$
=
30

 $\xrightarrow{\div 6}$ 

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

 $\xrightarrow{+1}$ 

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

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

