

Name: _____

Date: _____

2-step backtracking: Answers

(1)

x
=
9

 $\xrightarrow{\times 6}$

$6x$
=
54

 $\xrightarrow{+2}$

$6x + 2$
=
56

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

(6)

x
=
9

 $\xrightarrow{+2}$

$x + 2$
=
11

 $\xrightarrow{\times 1}$

$1(x + 2)$
=
11

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

(2)

x
=
2

 $\xrightarrow{+6}$

$x + 6$
=
8

 $\xrightarrow{\times 10}$

$10(x + 6)$
=
80

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

(7)

x
=
4

 $\xrightarrow{\times 2}$

$2x$
=
8

 $\xrightarrow{-8}$

$2x - 8$
=
0

$\xleftarrow{\div 2}$ $\xleftarrow{+8}$

(3)

x
=
9

 $\xrightarrow{+7}$

$x + 7$
=
16

 $\xrightarrow{\div 8}$

$\frac{(x+7)}{8}$
=
2

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

(8)

x
=
23

 $\xrightarrow{-8}$

$x - 8$
=
15

 $\xrightarrow{\div 3}$

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

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

(4)

x
=
16

 $\xrightarrow{-8}$

$x - 8$
=
8

 $\xrightarrow{\times 3}$

$3(x - 8)$
=
24

$\xleftarrow{+8}$ $\xleftarrow{\div 3}$

(9)

x
=
96

 $\xrightarrow{\div 8}$

$\frac{x}{8}$
=
12

 $\xrightarrow{-2}$

$\frac{x}{8} - 2$
=
10

$\xleftarrow{\times 8}$ $\xleftarrow{+2}$

(5)

x
=
69

 $\xrightarrow{-9}$

$x - 9$
=
60

 $\xrightarrow{\div 6}$

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

$\xleftarrow{+9}$ $\xleftarrow{\times 6}$

(10)

x
=
16

 $\xrightarrow{-7}$

$x - 7$
=
9

 $\xrightarrow{\times 7}$

$7(x - 7)$
=
63

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