

Name: _____

Date: _____

2-step backtracking: Answers

(1)

x	$\xrightarrow{+10}$	$x + 10$	$\xrightarrow{\times 3}$	$3(x + 10)$
=		=		=
9		19		57
	$\xleftarrow{-10}$		$\xleftarrow{\div 3}$	

(6)

x	$\xrightarrow{\div 7}$	$\frac{x}{7}$	$\xrightarrow{+5}$	$\frac{x}{7} + 5$
=		=		=
49		7		12
	$\xleftarrow{\times 7}$		$\xleftarrow{-5}$	

(2)

x	$\xrightarrow{\times 9}$	$9x$	$\xrightarrow{-4}$	$9x - 4$
=		=		=
10		90		86
	$\xleftarrow{\div 9}$		$\xleftarrow{+4}$	

(7)

x	$\xrightarrow{\div 4}$	$\frac{x}{4}$	$\xrightarrow{-10}$	$\frac{x}{4} - 10$
=		=		=
72		18		8
	$\xleftarrow{\times 4}$		$\xleftarrow{+10}$	

(3)

x	$\xrightarrow{-8}$	$x - 8$	$\xrightarrow{\times 6}$	$6(x - 8)$
=		=		=
9		1		6
	$\xleftarrow{+8}$		$\xleftarrow{\div 6}$	

(8)

x	$\xrightarrow{-4}$	$x - 4$	$\xrightarrow{\times 10}$	$10(x - 4)$
=		=		=
14		10		100
	$\xleftarrow{+4}$		$\xleftarrow{\div 10}$	

(4)

x	$\xrightarrow{\div 8}$	$\frac{x}{8}$	$\xrightarrow{-4}$	$\frac{x}{8} - 4$
=		=		=
48		6		2
	$\xleftarrow{\times 8}$		$\xleftarrow{+4}$	

(9)

x	$\xrightarrow{\times 10}$	$10x$	$\xrightarrow{+10}$	$10x + 10$
=		=		=
3		30		40
	$\xleftarrow{\div 10}$		$\xleftarrow{-10}$	

(5)

x	$\xrightarrow{\div 8}$	$\frac{x}{8}$	$\xrightarrow{+7}$	$\frac{x}{8} + 7$
=		=		=
56		7		14
	$\xleftarrow{\times 8}$		$\xleftarrow{-7}$	

(10)

x	$\xrightarrow{\times 9}$	$9x$	$\xrightarrow{-9}$	$9x - 9$
=		=		=
3		27		18
	$\xleftarrow{\div 9}$		$\xleftarrow{+9}$	

(11)

x	$x - 1$	$9(x - 1)$
=	=	=
8	7	63

$\xrightarrow{-1}$ $\xrightarrow{\times 9}$
 $\xleftarrow{+1}$ $\xleftarrow{\div 9}$

(16)

x	$6x$	$6x + 7$
=	=	=
6	36	43

$\xrightarrow{\times 6}$ $\xrightarrow{+7}$
 $\xleftarrow{\div 6}$ $\xleftarrow{-7}$

(12)

x	$x - 4$	$3(x - 4)$
=	=	=
5	1	3

$\xrightarrow{-4}$ $\xrightarrow{\times 3}$
 $\xleftarrow{+4}$ $\xleftarrow{\div 3}$

(17)

x	$\frac{x}{7}$	$\frac{x}{7} - 9$
=	=	=
98	14	5

$\xrightarrow{\div 7}$ $\xrightarrow{-9}$
 $\xleftarrow{\times 7}$ $\xleftarrow{+9}$

(13)

x	$\frac{x}{3}$	$\frac{x}{3} + 1$
=	=	=
27	9	10

$\xrightarrow{\div 3}$ $\xrightarrow{+1}$
 $\xleftarrow{\times 3}$ $\xleftarrow{-1}$

(18)

x	$2x$	$2x - 9$
=	=	=
5	10	1

$\xrightarrow{\times 2}$ $\xrightarrow{-9}$
 $\xleftarrow{\div 2}$ $\xleftarrow{+9}$

(14)

x	$\frac{x}{5}$	$\frac{x}{5} + 8$
=	=	=
50	10	18

$\xrightarrow{\div 5}$ $\xrightarrow{+8}$
 $\xleftarrow{\times 5}$ $\xleftarrow{-8}$

(19)

x	$x - 7$	$5(x - 7)$
=	=	=
9	2	10

$\xrightarrow{-7}$ $\xrightarrow{\times 5}$
 $\xleftarrow{+7}$ $\xleftarrow{\div 5}$

(15)

x	$x + 8$	$3(x + 8)$
=	=	=
1	9	27

$\xrightarrow{+8}$ $\xrightarrow{\times 3}$
 $\xleftarrow{-8}$ $\xleftarrow{\div 3}$

(20)

x	$7x$	$7x + 5$
=	=	=
2	14	19

$\xrightarrow{\times 7}$ $\xrightarrow{+5}$
 $\xleftarrow{\div 7}$ $\xleftarrow{-5}$