

Date: _____

2-step backtracking: Questions

(6)

	$+10$		$\times 8$	
	\longrightarrow		\longrightarrow	
x				
$=$		$=$		$=$
				88
	\longleftarrow		\longleftarrow	

(7)

Diagram (7) illustrates a sequence of operations on a variable x . The first box contains x above an equals sign. An arrow labeled $+3$ points to the second box, which contains an equals sign. An arrow labeled $\times 2$ points to the third box, which contains an equals sign above the number 26. There are also arrows pointing back from the second and third boxes to the first.

(8)

	$+4$		$\times 2$	
	\longrightarrow		\longrightarrow	
x				
$=$		$=$		$=$
				26
	\longleftarrow		\longleftarrow	

(9)

x	$+8$	$\times 9$
$=$	$=$	$=$
		126

(10)

Diagram illustrating the reverse order of operations for problem 10:

- Box 1: x (top), $=$ (middle)
- Box 2: $=$ (middle)
- Box 3: $=$ (middle), 136 (bottom)

Operations indicated by arrows:

- From Box 1 to Box 2: $+9$
- From Box 2 to Box 3: $\times 8$
- Reverse operations (indicated by arrows pointing left):
 - From Box 3 to Box 2: $\div 8$
 - From Box 2 to Box 1: -9