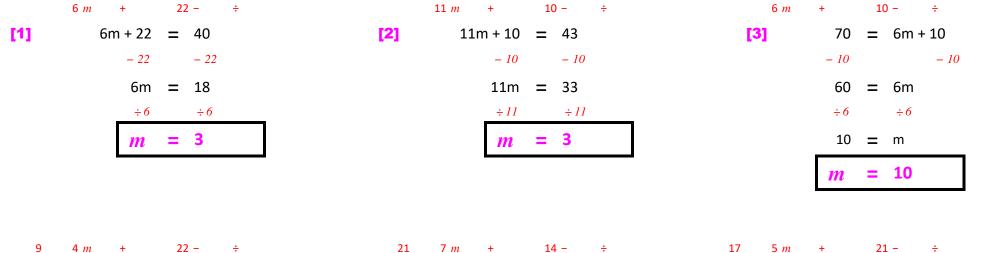
Basic Two-step Equations with Unknown on One SideDate:Through your working, show how you are keeping the equation balanced as you solvefor the variable. Round to 1 d.p. if necessary.				Name: http://www.learnersgrid.com	
[1]	6m + 22 = 40	<b>[2]</b> 11m + 10 = 43	[3]	70 = 6m + 10	
[4]	4m – 22 = 14	<b>[5]</b> 7m – 14 = 133	<b>[6]</b> 3	64 = 5m – 21	
[7]	-5m + 11 = -29	<b>[8]</b> 12m + 23 = -14	<b>[9]</b> -3	-63 = -9m + 9	
[10]	7m – 21 = -56	<b>[11]</b> 8m - 16 = -20	<b>[12]</b>	28 = 3m – 14	

## **SOLUTIONS** Page 1 of 2 **Basic Two-step Equations with Unknown on One Side**

Through your working, show how you are keeping the equation balanced as you solve for the variable. Round to 1 d.p. if necessary.

http://www.learnersgrid.com



2		~ ~ ~	- ·		~ ~ ~
[4]	4m – 22	=	14	I	[5]
	+ 22		+ 22		
	4m	=	36		
	$\div 4$		$\div 4$	_	
	m	=	9		

21	7 <i>m</i>	+	14	-	÷	
5]	7r	n – 14	=	133		
		+ 14		+ 14		
		7m	=	147		
		÷7		÷7		
		m	=	21		

5 <i>m</i>	+	21	L – ÷
[6]	64	=	5m – 21
	+ 21		+ 21
	85	=	5m
	÷5		÷5
	17	=	m
	m	=	17

SOLUTIONS	Continued - page 2 of 2	<b>Basic Two-step Equations with Un</b>	known on One Side
			http://www.learnersgrid.com
-5 <i>m</i> +	11 - ÷	$12 m + 23 - \div$	-9 m + 9 - ÷
[ <b>7</b> ] -5m + 11	L <b>=</b> -29	<b>[8]</b> 12m + 23 = -143	[ <b>9</b> ] -63 = -9m + 9
- 11	- 11	- 23 - 23	-9 -9
-5m	n = -40	12m = -166	-72 = -9m
÷-5	5 ÷-5	$\div 12 \qquad \div 12$	$\div -9 \qquad \div -9$
m	= 8	m = -13.8	8 <b>=</b> m
			m = 8
	24		
-5 7 <i>m</i> +	21 - ÷	$-23  8 m + 16 - \div$	$14  3m  +  14 -  \div$
[10] 7m - 21 + 21	1 = -56	[11] $8m - 16 = -200 + 16 + 16$	$\begin{bmatrix} 12 \end{bmatrix} 28 = 3m - 14 \\ + 14 + 14 \end{bmatrix}$
	n = -35	8m = -184	42 = 3m
÷ 7		$\div 8 \div 8$	÷3 ÷3
m	= -5	m = -23	14 = m
			m = 14