

Reasoning and Problem Solving – Addition and Subtraction answers

1.	Add the word:	Calculation	Inverse Operation Check
	most	$141 + 4 = 145$	$145 - 4 = 141$
	grand	$141 + 5 = 146$	$146 - 5 = 141$
	welcome	$141 + 7 = 148$	$148 - 7 = 141$
	Remove the word:	Calculation	Inverse Operation Check
	in	$141 - 2 = 139$	$139 + 2 = 141$
	generous	$141 - 8 = 133$	$133 + 8 = 141$
	celebrate	$141 - 9 = 132$	$132 + 9 = 141$

2. $455 + 30 = 485$; he has subtracted 30 instead of adding 30

$455 - 30 = 425$; he has subtracted 3 ones instead of 3 tens

3. $365 + 100 = 465$ $365 + 400 = 765$

$365 + 200 = 565$ $365 + 500 = 865$

$365 + 300 = 665$ $365 + 600 = 965$

4.

Rugs	
Already have:	To make 200:
Room 1: 190	10
Room 2: 150	50
Room 3: 130	70
Room 4: 160	40

Couches	
Already have:	To make 200:
Room 1: 110	90
Room 2: 180	20
Room 3: 120	80
Room 4: 140	60

5.

Lamps	
Already have:	To make 200:
Room 1: 191	9
Room 2: 196	4
Room 3: 193	7
Room 4: 192	8

Candles	
Already have:	To make 400:
Room 1: 397	3
Room 2: 395	5
Room 3: 394	6
Room 4: 398	2

6. Answers will vary but should match up with the increasing quantities depicted in the picture: for example, 10 Sapphires, 40 Rubies and 100 Emeralds.

7. $510 - 70 = 440$ chairs can be used to play the game. There are 455 confirmed guests, so he needs another 15 chairs for everyone to be able to play.

8. No. The rule is add 50 not subtract 50.

9.

Answer: 485 $- 227$ <u>258</u> females	Check: 258 $+ 227$ <u>485</u>
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10. There could have been between 215 and 224 children, so:

$485 - 224 = 261$ and $485 - 215 = 270$

There could have been between 261 and 270 adults.