Basic Mathematics Solutions

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0.1 Chapter 1

0.1.1 Exercise §2

Using Commutativity and Associativity in proving the following

1

$(a+b)+(c+d)=(a+d)+(b+c)$
$a+b+c+d$ by associativity
$a+b+c+d=a+b+d+c=a+d+b+c$ by commutativity

2

$(a+b)+(c+d)=(a+c)+(b+d)$
$a+b+c+d$ by associativity
$a+b+c+d=a+c+b+d$ by commutativity

14

Solve for x
$-2+x=4$
$x=4+2=6$

15

$2-x=5$
$-x=5-2=3$
$x=-3$

16

$x-3=7$
$x=7+3=10$

17

$-x+4=-1$
$-x=-1-4=-5$
$x=5$

18

$4-x=8$
$-x=8-4=4$
$x=-4$

19

$-5 - x = -2$
$-x = -2 + 5 = 3$
$x = -3$

20

$-7 + x = -10$
$x = -10 + 7 = -3$

21

$-3 + x = 4$
$x = 4 + 3 = 7$