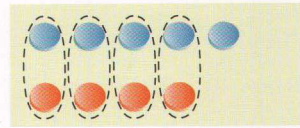


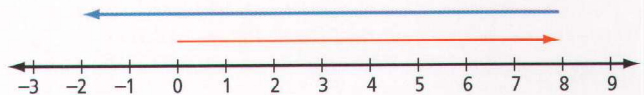
6.10 - Questions Handout #s 1 - 17

Communicate the Ideas

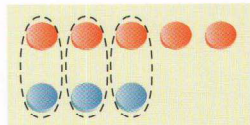
- During the field hockey season, Andre was on the field when his team scored 15 goals. While he was on the field, the opposing team scored 17 goals. Explain how you would figure out Andre's plus/minus rating.
- Explain how the zero principle was used to find this sum.
 $-5 + 4 = -1$



- Explain how the number line models this sum.
 $8 + (-10) = -2$



- What sum is modelled here? Explain how you know.



Check Your Understanding

Practise

For help with questions 5 and 6, refer to Example 1.

- What integer sum is shown? Give each result.



- Find the sum represented by the integer chips.

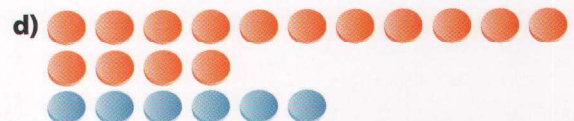
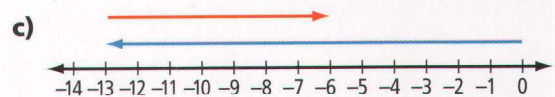
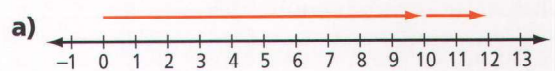


For help with questions 7 to 9, refer to Example 2.

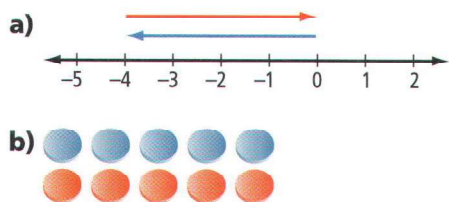
- Use integer chips or a number line to model each sum.

- a) $4 + (-9)$ b) $-3 + (-5)$
 c) $-4 + (-4)$ d) $2 + (-3)$

- What integer sum is shown? Give each result.



9. What integer sum is shown? What do you notice about the results? Explain why this happens.



For help with questions 10 to 12, refer to Example 3.

10. Decide whether each sum is positive, negative, or zero. Do not evaluate.

- a) $6 + (-6)$ b) $7 + 19$
 c) $-4 + (-25)$ d) $-7 + 4$
 e) $-10 + 15$ f) $123 + (-789)$

11. Use mental math to find each sum.

- a) $4 + 10$ b) $3 + (-9)$
 c) $-3 + (-6)$ d) $-2 + (-7)$
 e) $7 + (-4)$ f) $-5 + (-3)$

12. Find the plus/minus rating for the captains of the boys' and girls' hockey teams.

Player	Goals For	Goals Against
Surjeet	7	8
Elizabeth	8	6

13. Calculate each sum.

- a) $11 + 4$ b) $-20 + 15$
 c) $25 + (-65)$ d) $-41 + (-52)$
 e) $73 + (-83)$ f) $-50 + 24$

14. Calculate each sum.

- a) $6 + 5 + 1$
 b) $6 + (-10) + 3$
 c) $10 + (-12) + (-8)$
 d) $-13 + 7 + (-15)$
 e) $-40 + (-60) + (-50)$
 f) $7 + (-14) + (-10) + 12$

Apply

15. In golf, *par for the course* means the average number of strokes needed by an expert golfer to complete the round. People who score less than this get a score under par. For example, 2 under par is a score of -2 . Jeannie's scores in four games of mini-putt golf were -4 , -6 , 2 , and -3 . Cameron's scores were -2 , -3 , -1 , and -3 . How did Jeannie's total score for the four games compare to Cameron's?

16. The table shows the performance of two stocks on the Stock Exchange over 5 days last week. ExMac started the week at \$23, and MaxLine started at \$25. Which company ended the week with a higher price?

Stock	Mon	Tues	Wed	Thurs	Fri
ExMac	+5	-1	+2	-3	+4
MaxLine	-2	+1	-5	0	+7

17. The kelvin temperature scale starts with absolute zero. This is the temperature at which there is no energy left. It cannot get any colder. To get the kelvin temperature from the Celsius temperature, add 273. Write each Celsius temperature in kelvin (symbol K).
- a) 0°C
 b) -40°C
 c) -100°C
 d) -273°C

Did You Know?

The kelvin temperature scale was designed by Lord Kelvin (William Thompson, 1824–1907), a British inventor and scientist. To learn more about Lord Kelvin, go to www.mcgrawhill.ca/links/math8 and follow the links.

