

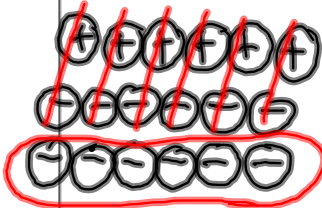
Final Exam Unit 2 review

1. Model -3 in 2 different ways.

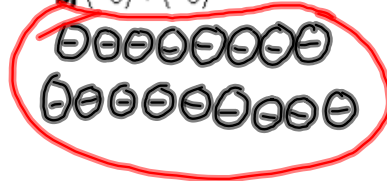


2. Find each sum using tiles.

a) $(+6) + (-12) = -6$



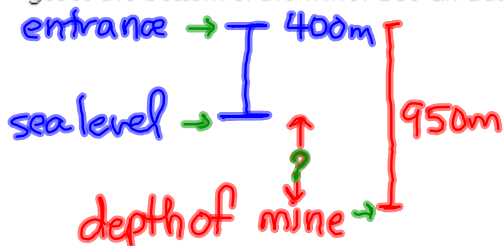
b) $(-8) + (-9) = -17$



c) $(+2) + (+7) = +9$



3. The elevation of the entrance to a mine is 400 m above sea level. The workers travel 950 m to get to the bottom of the mine. Use an addition sentence to find the depth of the mine.



$$(+400) + (-950) = -550\text{m}$$

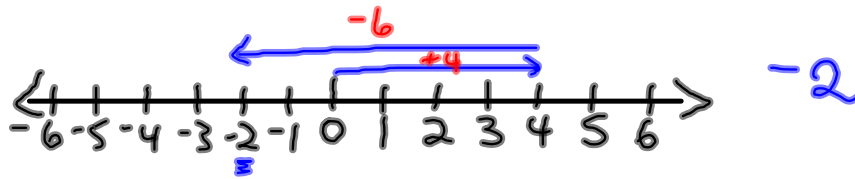
4. These are the scores on each hole of mini-golf. Find the total score.

Score	-2	+1	0	+3	-1	+2	-1	0	-2
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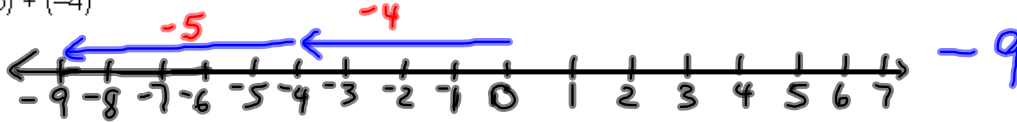
$$\begin{aligned}
 &(-2) + (+1) + 0 + (+3) + (-1) + (+2) + (-1) + 0 + (-2) \\
 &\quad \underbrace{(-1) + (+3) + (-1) + (+2) + (-1) + (-2)} \\
 &\quad \quad \underbrace{(+2) + (-1) + (+2) + (-1) + (-2)} \\
 &\quad \quad \quad \underbrace{(+1) + (+2) + (-1) + (-2)} \\
 &\quad \quad \quad \quad \underbrace{(+3) + (-1) + (-2)} \\
 &\quad \quad \quad \quad \quad \underbrace{(+2) + (-2)} = 0
 \end{aligned}$$

5. Use a number line to add.

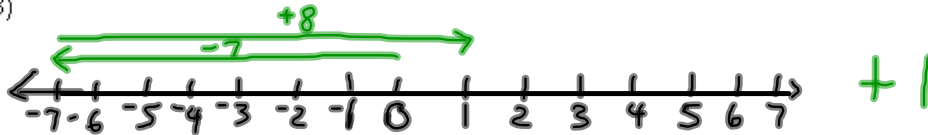
a) $(+4) + (-6)$



b) $(-5) + (-4)$



c) $(-7) + (+8)$



d) $(+4) + (+3)$

6. The temperature in Calgary was -7°C . A Chinook caused the temperature to rise 12°C . What was the final temperature?

$$(-7) + (+12) = +5^{\circ}\text{C}$$

7. Add.

a) $(+5) + (-12) + (-4)$

$$\underbrace{(+5) + (-12)}_{(-7)} + (-4) = -11$$

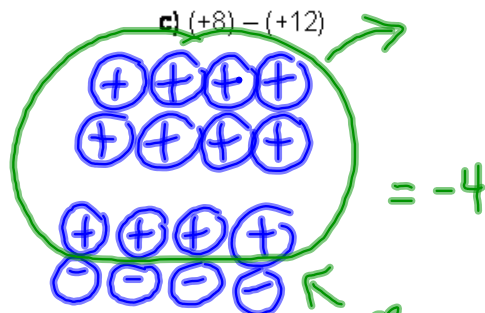
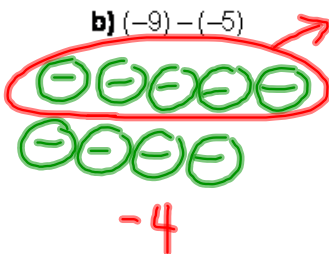
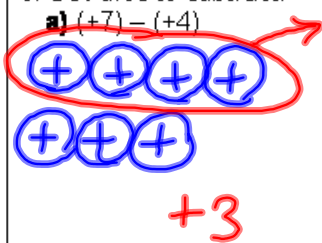
b) $(-7) + (+15) + (-12)$

$$\underbrace{(-7) + (+15)}_{(+8)} + (-12) = -4$$

c) $(+9) + (-6) + (-7)$

$$\underbrace{(+9) + (-6)}_{(+3)} + (-7) = -4$$

8. Use tiles to subtract.



9. What do you subtract -3 from to get the answer +4?

$$\square - (-3) = +4$$

$$\square + (+3) = +4$$

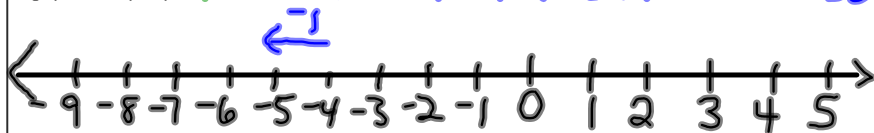
Answer is +1

use zero pairs

10. Use a number line to subtract. Then subtract without using a model.

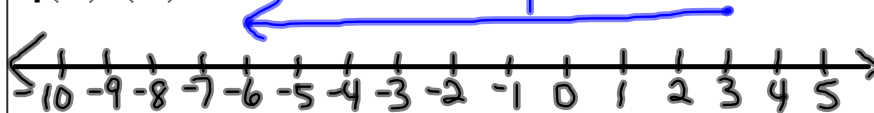
a) $(-5) - (-4)$

Think: what is the difference between -5 & -4?



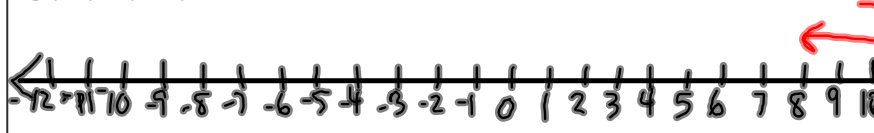
$$\begin{aligned} (-5) - (-4) \\ = (-5) + (+4) = -1 \end{aligned}$$

b) $(-6) - (+3)$



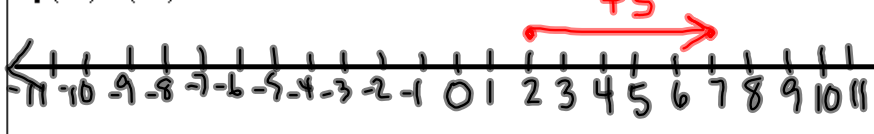
$$\begin{aligned} (-6) - (+3) \\ = (-6) + (-3) = -9 \end{aligned}$$

c) $(+8) - (+12)$



$$\begin{aligned} (+8) - (+12) \\ = (+8) + (-12) \\ = -4 \end{aligned}$$

d) $(+7) - (+2)$



$$\begin{aligned} (+7) - (+2) \\ = (+7) + (-2) \\ = +5 \end{aligned}$$

11. What is the distance between an airplane cruising at an altitude of 3500 m and a submarine at a depth 975 m. Use a subtraction statement to find it.

$$\begin{aligned} (+3500) - (-975) \\ = (+3500) + (+975) \\ = +4475\text{m} \end{aligned}$$