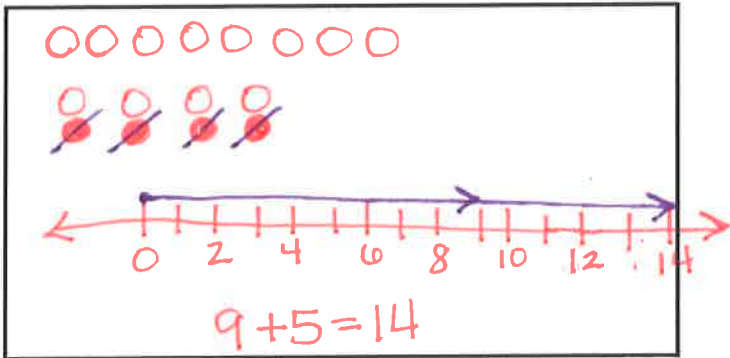


Name Key Period _____ Thursday, October 20, 2016

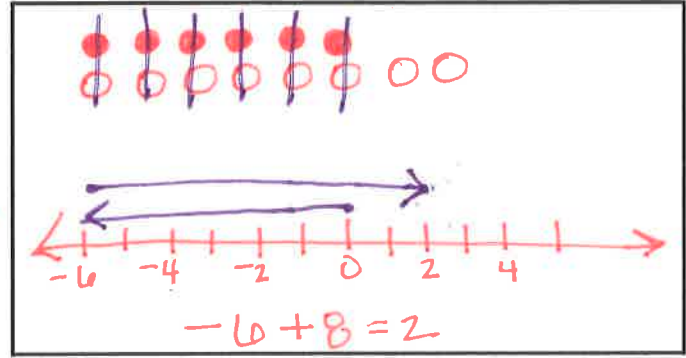
Unit 4 Integer Review (On-Level)

Solve the following problems. You must use your positive and negative integer counters or a number line. If you use integer counters then you must have a key.

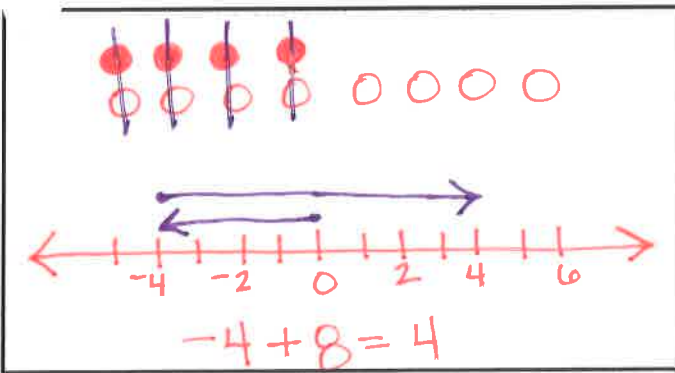
1. $9 - (-5) = +14$



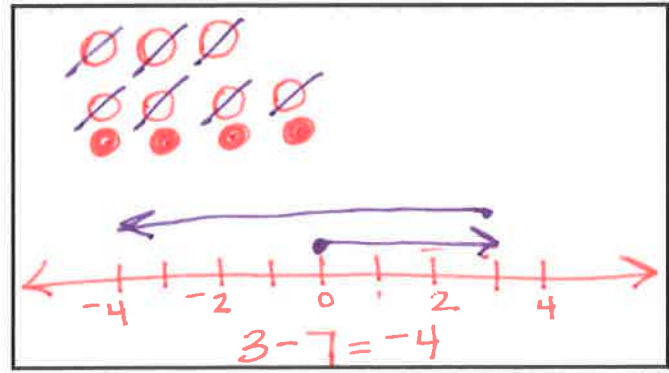
2. $-6 + 8 = +2$



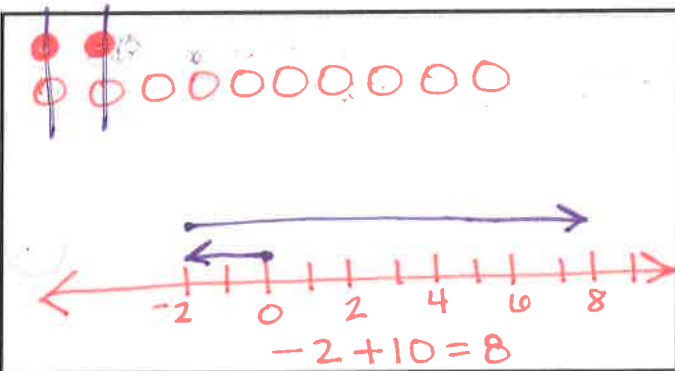
3. $-4 + 8 = +4$



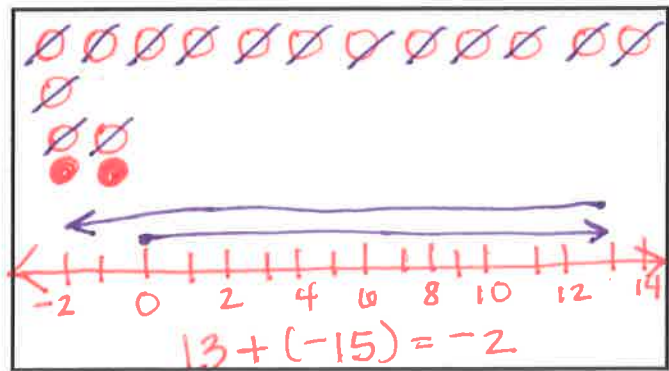
4. $3 - 7 = -4$



5. $-2 + 10 = +8$



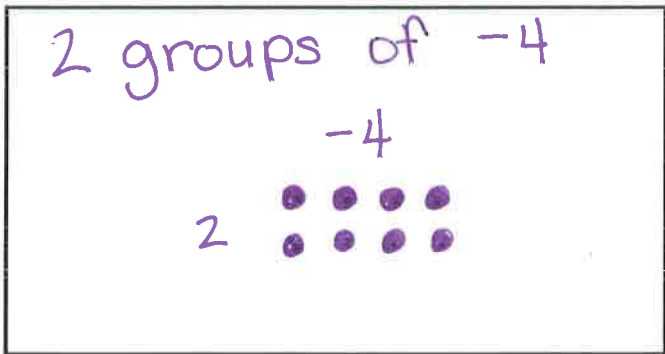
6. $13 - 15 = -2$



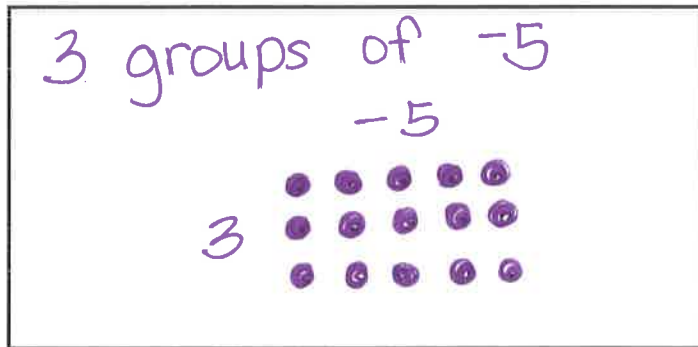
KEY: Positive \circ Negative \bullet

Draw models to represent the following problems and then solve the problems.

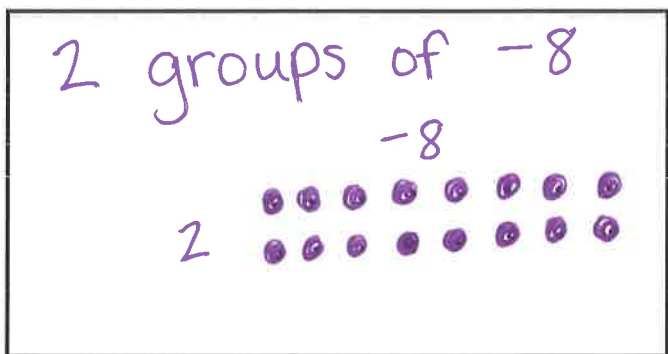
7. $2 \times -4 = \underline{-8}$



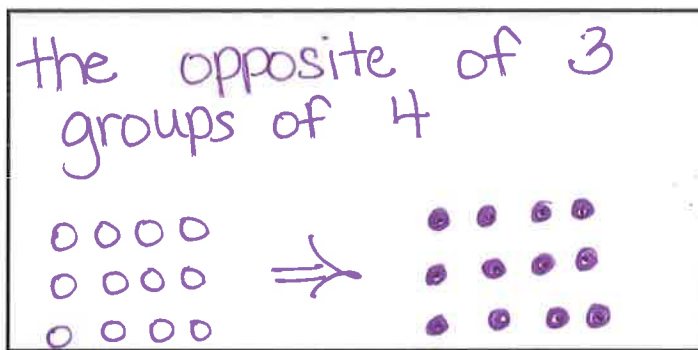
8. $3(-5) = \underline{-15}$



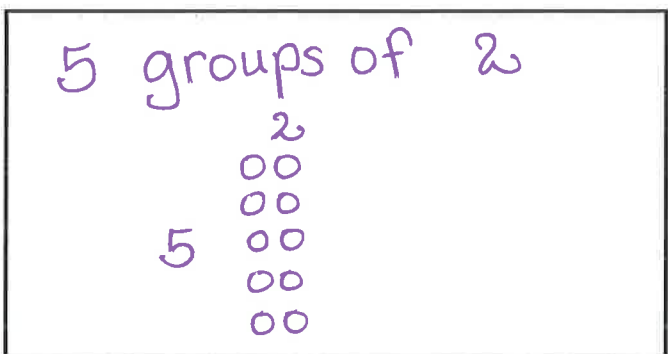
9. $2 \times -8 = \underline{-16}$



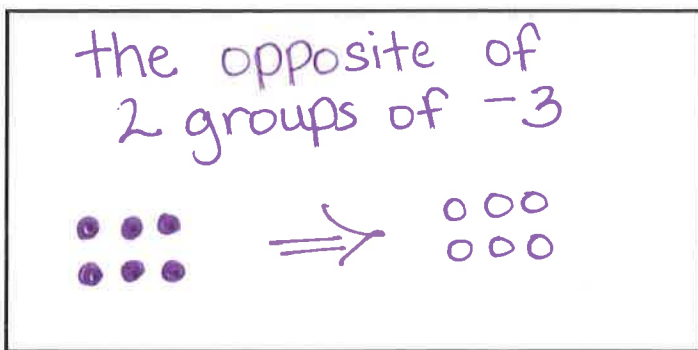
*10. $-3(4) = \underline{-12}$



11. $5 \times 2 = \underline{+10}$



*12. $-2(-3) = \underline{+6}$



Solve the following problems.

13. $29 + (-20) = \underline{+9}$
subtract

14. $-67 + (-18) = \underline{-85}$
add

15. $-49 - 27 = \underline{-76}$
 $-49 + (-27)$

16. $-72 \div 18 = \underline{-4}$ $18 \overline{) 72} \begin{array}{r} 4 \\ 72 \\ \underline{72} \\ 0 \end{array}$
 $N \div P = N$

17. $56 \div -7 = \underline{-8}$
 $P \div N = N$

18. $-12 \times 4 = \underline{-48}$
 $N \times P = N$

19. $-12(-15) = \underline{+180}$ $\begin{array}{r} 1 \\ 12 \\ \times 15 \\ \hline 60 \\ 120 \\ \hline 180 \end{array}$
 $N \times N = P$

20. $(-23) - (-6) = \underline{-17}$
 $-23 + 6$ (subtract)

21. $(-3) + 29 = \underline{+26}$

22. $(-17) - (-9) = \underline{+8}$
 $-17 + 9$ (subtract)

23. $27 - (-5) = \underline{+32}$
 $27 + 5$ (add)

24. $(-49) \div (-7) = \underline{+7}$
 $N \div N = P$

25. $-14(-20) = \underline{+280}$ $\begin{array}{r} \times 14 \\ 20 \\ \hline 00 \\ 280 \\ \hline 280 \end{array}$
 $N \times N = P$

26. $56 \div -14 = \underline{-4}$ $\begin{array}{r} 4 \\ 14 \overline{) 56} \\ \underline{56} \\ 0 \end{array}$
 $P \div N = N$

True or False

27. False When adding integers and the signs are different, you subtract and keep the sign of the number with the greater absolute value.

28. True The rules for multiplying and dividing integers are the same.

29. True When dividing integers, two negative numbers will always have a positive answer.

30. False When multiplying integers, a positive and negative number, will be negative will have the sign of the larger number.

True When adding integers, like signs are added and you keep that sign for your answer.

Write an equation and find the solution of each of the problems below. Be careful to pay attention to any directions that require a certain operation.

32. Suppose the temperature outside is 22 degrees and is dropping 3 degrees each hour. How much will the temperature change in 8 hours? What will the temperature be?

$$-3 \times 8 = -24^\circ$$

$$-24 + 22 = \boxed{-2^\circ}$$

33. A football team lost 9 yards on each of three consecutive plays. Write a **multiplication equation** that represents the team's total change in position for the three plays.

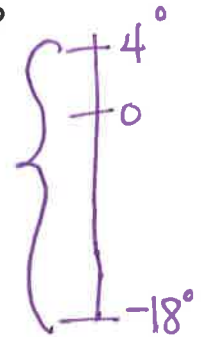
$$-9 \times 3 = -27 \text{ yards}$$

34. What is the change in temperature a customer in a grocery store experiences when they walk from the chilled vegetables section at 4 degrees C to the frozen foods section, which is set to -18 degrees C?

$$4 - (-18)$$

$$4 + 18 =$$

$$\boxed{22^\circ}$$



35. The length of an island is changing at the average rate of -17 inches per year. How long will it take for the change in the length of the island to be negative 255 inches? Write a **division equation**

that represents this situation.

$$-255 \div (-17) = 15 \text{ inches}$$

$$\begin{array}{r} 015 \\ 17 \overline{) 255} \\ \underline{-17} \\ 85 \\ \underline{-85} \\ 0 \end{array}$$

$$\begin{array}{r} 17 \\ + 17 \\ \hline 34 \\ + 17 \\ \hline 51 \\ + 17 \\ \hline 68 \\ + 17 \\ \hline 85 \end{array}$$