

Academic Cluster 6B Test Review

- 1) Tim had 75 cents in his pocket. His pocket had a hole in it, and he **lost 10** cents on his way to the park. He **lost another 15** cents while playing at the park, but on the way home he **found 25** cents. Which of the following best represents the amount of money Tim had in his pocket when he got home?

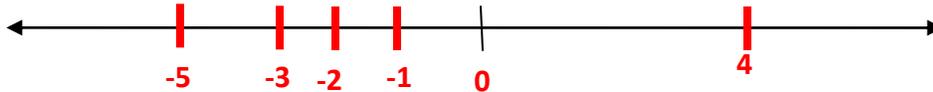
A) $75 + (10) + (15) + (25)$

B) $75 + (10) + (15) + (-25)$

C) $75 + (-10) + (-15) + (25)$

D) $75 + (-10) + (-15) + (-25)$

- 2) Place the following numbers on the number line below: 0, 4, -1, -3, -2, -5



- 3) Mr. Santos thought that the refrigerator was not cooling properly. He checked the temperature every hour one day, beginning at 8:00 a.m. This chart shows the changes in temperature he recorded:

Time	Temperature change (°F)	45
9:00 AM	-4	$45 - 4 = 41$
10:00 AM	+2	$41 + 2 = 43$
11:00 AM	-7	$43 - 7 = 36$
12:00 PM	-1	$36 - 1 = 35$
1:00 PM	+3	$35 + 3 = 38$
2:00 PM	+1	$38 + 1 = 39$

If the beginning temperature in the refrigerator was 45 °F, what was the ending temperature at 2:00 PM?

A) 33 °F

B) 39 °F

C) 51 °F

D) 57 °F

- 4.) On the five plays that Kenny carried the ball during the football game, he made the following yardage:
2, 5, -3, -1, 4

Which of the following shows the yardages in order from LEAST to GREATEST?

A) 2, -3, 4, 5, -1

B) -1, -3, 2, 4, 5

C) -3, 2, -1, 4, 5

D) -3, -1, 2, 4, 5

5) Which of the following integers does **not** lie between -9 and 11:

A) -8

B) 0

C) 10

D) -10

6) The table below shows the 6:00 AM temperature, in degrees Fahrenheit, in New York City for one week in January:

Day	Temperature (in °F)
Monday	13
Tuesday	5
Wednesday	-7
Thursday	0
Friday	-1
Saturday	-14
Sunday	2

Which conclusion can be drawn from the table?

A) It was colder on Wednesday than on Saturday.

B) The coldest day of the week was Thursday.

C) The warmest day of the week was Tuesday.

D) It was warmer on Friday than on Wednesday

7) The high temperature in Lynchburg dropped 3 degrees each night for five days straight. Which expression could **NOT** be used to find the total temperature change over the five days? (6.1C)

A) $(-3)(5)$

B) $(-3) + (-3) + (-3) + (-3) + (-3)$

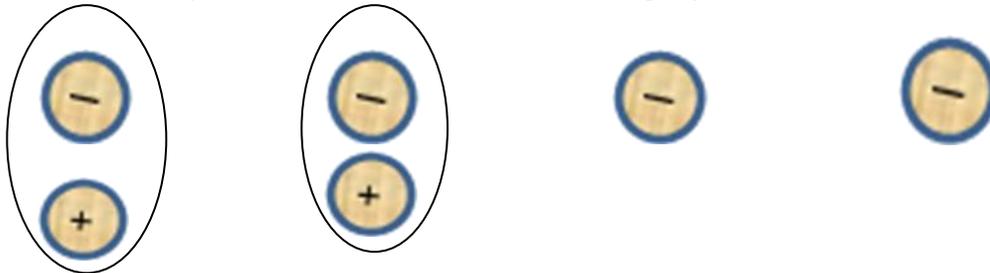
C) $(-3) - 5$

D) $-3 - 3 - 3 - 3 - 3$

8) Nicholas used the following counters to add positive and negative integers:



This shows how he paired his counters to solve an integer problem:



Which expression represents the problem Nicholas was trying to solve?

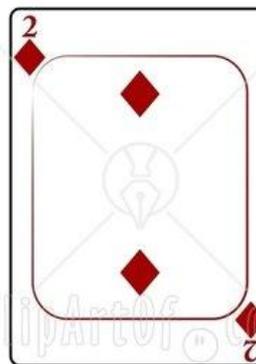
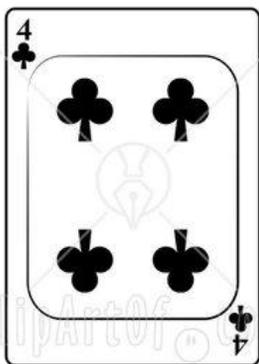
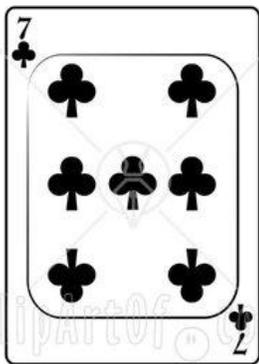
A.) $-2 + 4$

B.) $-4 + 2$

C.) $6 - 4$

D.) $4 + 2$

9) Marc and Liza are practicing addition of integers by playing cards. Black cards (The 7 and 4) represent positive numbers and red cards (the 3 and 2) represent negative numbers. What is the sum of **all 4** cards shown below? $7 + (-3) + 4 + (-2) = 6$, so the sum is 6



10) Which expression BEST represents the length of line segment **AB** on the number line below? (7.2C)



A) -6

B) 2

C) -2

D) 6

11) Madeline has an account balance of \$100 in her checking account. Last week, she deposited \$200, withdrew \$50, and wrote a check for \$80.

How much does Madeline have left in her checking account? Show your work or explain how you got your answer.

In order, she started with 100, so $100 + 200 = 300$,

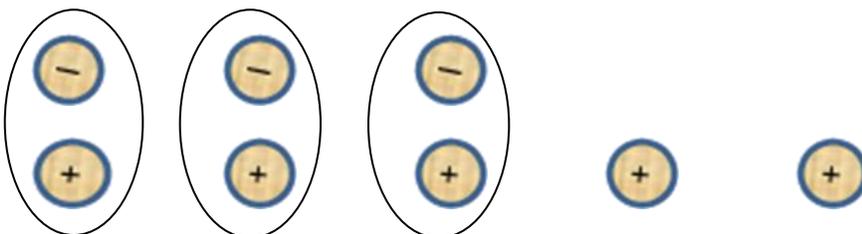
Then $300 - 50 = 250$, and finally $250 - 80 = 170$

So her final balance was \$170

12) These counters can be used to add positive and negative integers:



This shows the counters paired to solve an integer problem.



What equation is represented by this figure? **$-3 + 5 = 2$**

13) Which of the following integers is between -25 and 50?

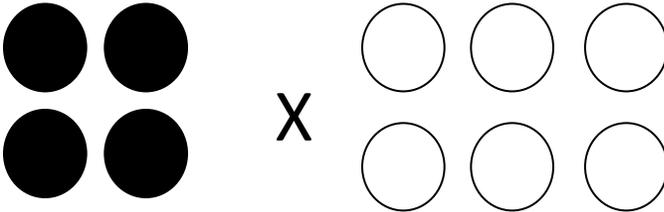
A) 15

B) -26

C) 51

D) -50

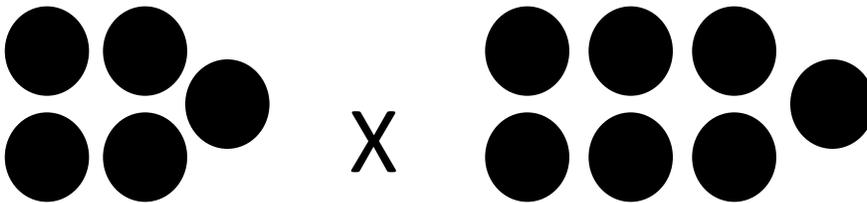
14) Each black circle represents -1, and each white circle represents +1.



What is the product of the 2 integers represented in the above?

-4 x 6 = -24, so the product is -24

15) Each black circle represents -1, and each white circle represents +1,



What is the product of the 2 integers represented above?

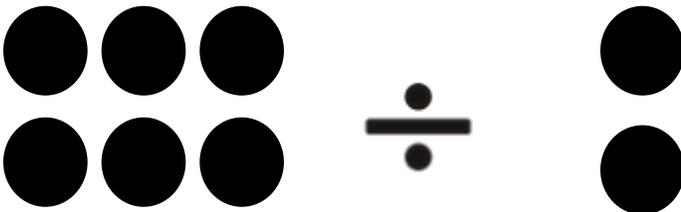
A) +2

B) +35

C) -12

D) -35

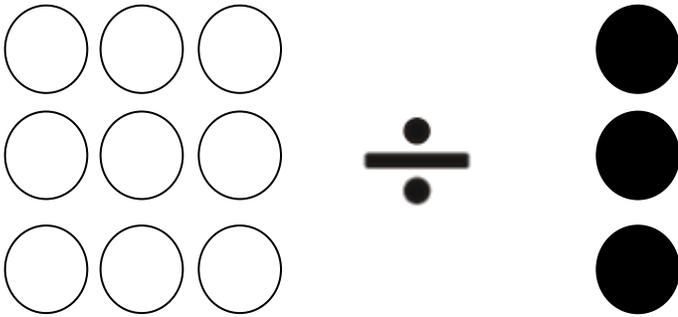
16) Each black circle represents -1, and each white circle represents +1,



What is the quotient of the 2 integers represented above?

-6 ÷ (-2) = 3, so the quotient is 3

17) Each black circle represents -1, and each white circle represents +1,



What is the quotient of the 2 integers represented above?

A) +6

B) +3

C) -3

D) -6

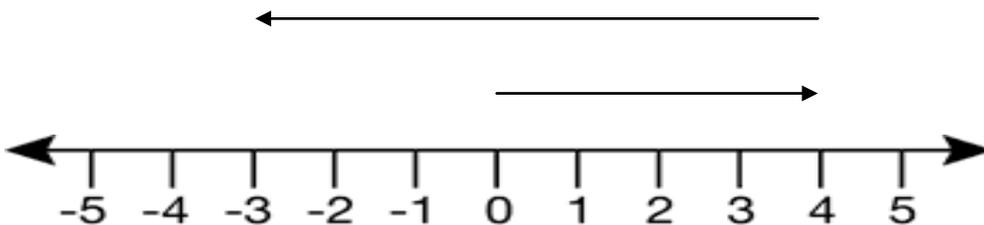
18) Simplify the following expression:

$$|2 + -6| + 8 \cdot -5$$

The straight lines mean absolute value, so $2 + (-6)$ is -4 , but the absolute value of -4 is 4 , so

$4 + 8 \cdot -5$, then $4 + (-40)$, so the answer is -36

19) Write an addition statement for this number line:



A) $(+4) + (-7) = +11$

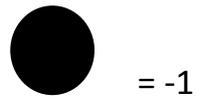
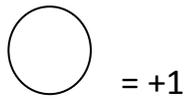
B) $(+4) + (+7) = -3$

C) $(-3) + (-7) = +4$

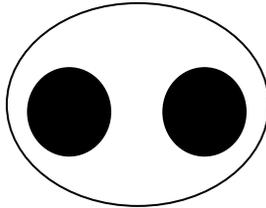
D) $(+4) + (-7) = -3$

20) Which model correctly represents $2(-3)$?

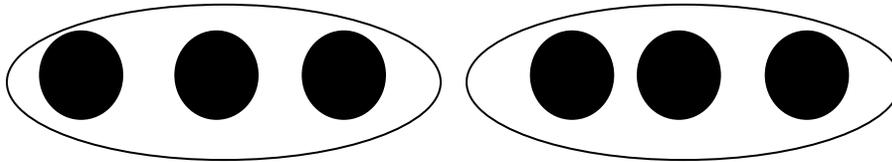
Key



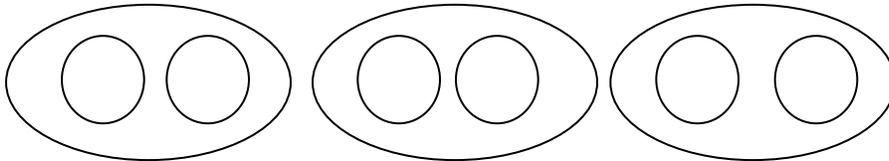
A.



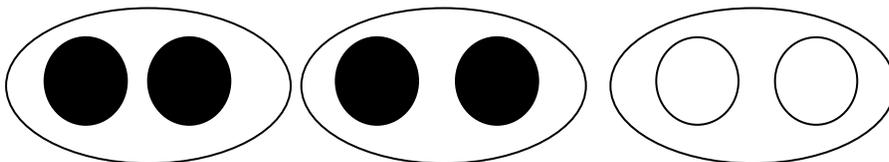
B.



C.



D.



22. Ann drew the following model to represent an expression.

Key



= 1



= -1



+



Which expression does Ann's model represent?

A. $2 + 4$

B. $-2 + (2 \times 2)$

C. $2 + 2(-2)$

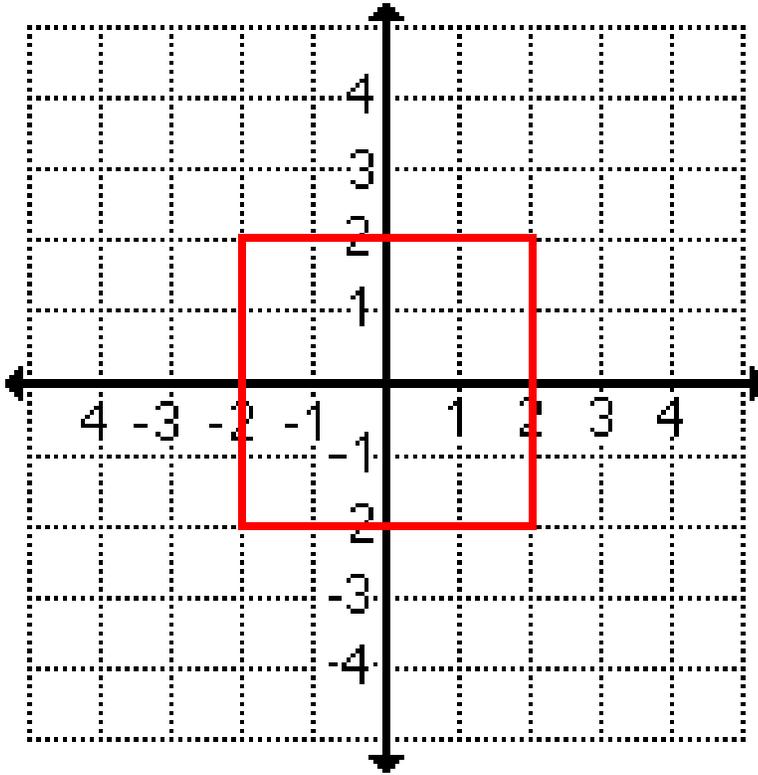
23. Draw a square on the coordinate plane, so that each vertex is in a different quadrant. When you are done give the ordered pair for each vertex.

(2, 2)

(2, -2)

(-2, -2)

(-2, 2)



24. Which of the following statements is NOT true?

A) A negative plus a negative is always a negative

B) A negative plus a positive is always a negative

C) A negative times a negative is always positive

D) A negative divided by a positive is always negative