



Students & families of Edward W. Bok Academy North,


This letter is to explain what is expected of you to complete during the Summer to ensure that we are staying relevant with our standards in math and reading. Please make sure you read through this entire letter to understand the expectations.


The math packet that is attached is for all grades levels. The skills presented in the packet are a review of basic number sense to prepare you for your level of math that you will be taking for the 2022-2023 school year. You can complete the packet the following ways: paper/pencil (this option entails you to print out the packet from your home computer OR pick up your packet from the front office). If you do NOT have access to a printer at your house and can't pick up a packet at the school, then you may view the packet and work out the problems on notebook paper and bring in the packet to your 2022-2023 math teacher upon returning to school.

Again, your packets are NOT an option, but an EXPECTATION, so we can be prepared for the upcoming school year and achieve the BOK WAY.

Thank you in advance,

Math Department

REPRESENT	Represent each number below as two different products. The first has been done for you as an example. a. $50 = 5 \times 10$ b. $120 =$ c. $84 =$ d. $175 =$ e. $1,000 =$ 2×25						
COMPARE	Shade in any rectangle that has a value greater than 25. <div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; margin: 5px;">6(5)</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$12 + 12$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$87 - 52$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$100 \div 3$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">9(3)</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$16 + 6$</div> <div style="border: 1px solid black; padding: 5px; margin: 5px;">$48 \div 2$</div> </div>	JUSTIFY	Beckett went to two different stores at the mall. He purchased a \$36 hat at the first store and a \$52 pair of shoes at the second. Beckett estimates that he spent a little less than \$80 total. Is Beckett's estimate reasonable? Explain your thinking. <hr/> <hr/> <hr/> <hr/> <hr/>				
DESCRIBE	Reagan and her two sisters have 30 minutes to play on a tablet and their mom instructed them to split the time evenly. The situation can be represented by the equation $30 \div 3 = 10$. Describe what 10 represents in the situation. <hr/> <hr/> <hr/>	PROBLEM SOLVE	Use the digits 1, 2, 3 and 4 to fill in each rectangle in order to create the sum closest to 50. Each digit may only be used once. <div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 10px;">+</div> <table border="1" style="border-collapse: collapse; text-align: center;"> <tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr> <tr><td style="width: 30px; height: 30px;"></td><td style="width: 30px; height: 30px;"></td></tr> </table> </div> <hr/>				

PROBLEM SOLVE	Fill in each line so that each addition statement has a sum of 30. Once a number has been used on a line, it cannot be used again. $\underline{\quad\quad} + \underline{\quad\quad} = 30$ $\underline{\quad\quad} + \underline{\quad\quad} + \underline{\quad\quad} = 30$ $\underline{\quad\quad} + \underline{\quad\quad} + \underline{\quad\quad} + \underline{\quad\quad} = 30$	ORDER	Solve a-d. Then, record the letters in ascending order according to their solutions. a. $6 \times (12 + 3) = \underline{\quad\quad}$ b. $21 \div 7 + 29 = \underline{\quad\quad}$ c. $11 + (80 \div 4) = \underline{\quad\quad}$ d. $16 \times 3 - 3 = \underline{\quad\quad}$ <hr/>
DESCRIBE	Ashley and Jessica multiplied 406×4 but got two different products as shown below. Describe which student made an error. <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Ashley $\begin{array}{r} 2 \\ 406 \\ \times 4 \\ \hline 1804 \end{array}$ </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Jessica $\begin{array}{r} 2 \\ 406 \\ \times 4 \\ \hline 1624 \end{array}$ </div> </div>		
JUSTIFY	Keith wrote the following on the board: $"4 + 6 = 46"$ Is he correct? Why or why not? <hr/> <hr/>	ESTIMATE	Mr. Bradley has 304 students that he needs to separate into 15 groups for a field trip. Estimate the approximate number of students that will be in each group. <hr/>

DESCRIBE

Fill out the table by multiplying each value by 2 and then by 20.

	x 2	x 20
1		
3		
5		
12		

Describe any patterns you notice:



PROBLEM SOLVE

Use the cards below to complete the blanks and make a true statement. Each card can only be used once.

- 54
- 61
- 34

a. $52 + 28 > 10 + \underline{\quad}$

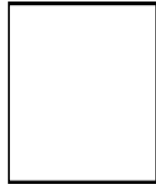
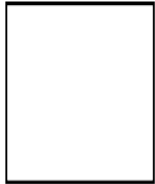
b. $\underline{\quad} < 24 + 29$

c. $73 + 25 = \underline{\quad} + 37$



REPRESENT

Carmen wants to build a rectangular garden with a total area of 100 square feet. Label the rectangles with three different possible sets of dimensions that she could choose.



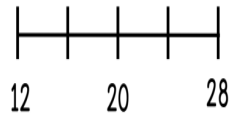
JUSTIFY

Justice believes that if she multiplies any number by 2, the resulting product will always be an even number. Is her thinking correct? Explain.



ORDER

Amelia earned \$18 babysitting yesterday. Place a point on the number line to represent this value.



DESCRIBE

Label each statement below as true or false.

- _____ a. The opposite of -51 is 51.
- _____ b. 16 is closer to zero than -16.
- _____ c. A number and its opposite are the same distance from zero on a number line.



Create an integer that could be used to represent each situation below.

- _____ a. Kevin owes his brother \$17.
- _____ b. Alyssa deposited \$158 into her bank account.
- _____ c. James made a profit of \$275 selling snow cones over the weekend.



COMPARE

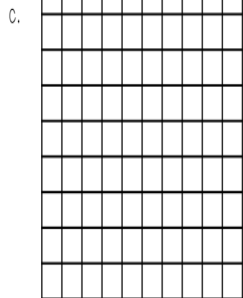
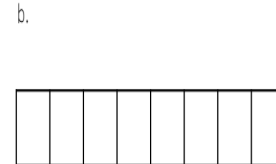
Fill in each statement with the correct inequality symbol (< or >) in order to make the statement true.

- a. $0 \underline{\quad} -10$
- b. $-20 \underline{\quad} -21$
- c. $-5 \underline{\quad} 4$
- d. $33 \underline{\quad} 13$



REVIEW

Assume each shape represents one whole. Shade 75% of each shape below.



ORDER

The cards below list the current temperature in five different cities. List the cities in order from coldest to warmest temperature.

Flagstaff
0° F

Erie
-8° F

Boulder
13° F

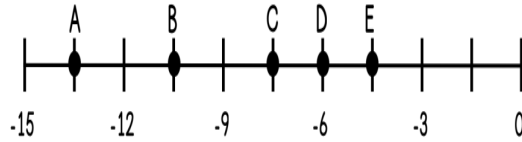
Buffalo
2° F

Albany
-11° F



ORDER

Armani plotted a point on the number line that is greater than -10 but less than -6. Which point below could be hers?



COMPARE

Jake and his friends are playing a game, and the person who scores closest to 0 wins. According to the scores listed below, who is the winner?

NAME	SCORE
Jake	-3
Kevin	4
Linus	2
MJ	-1



PROBLEM SOLVE

a. The number 6 is 7 units away from 13 on a number line. Which other integer is 7 units away from 6 on a number line?

b. Which two integers are 10 units away from 5 on a number line? Draw a picture if needed.

c. Starting at -7 on a number line, Darcy moved 4 units to the right. What integer did Darcy land on?



DESCRIBE

List 3 different types of real-world situations that would be represented by negative integers.



REVIEW

Circle true or false for each statement below. If a statement is false, explain your reasoning in the space underneath.

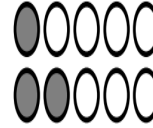
a. $13.5 = 10 + 3 + 0.5$
True or False?

b. $0.375 = 0.3 + 0.7 + 0.5$
True or False?



REPRESENT

Write an equation and solution for the integer addition represented by the counters below.



KEY

= POSITIVE
 = NEGATIVE



COMPARE

Fill in each rectangle with $<$, $>$ or $=$ in order to make the statement true.

a. $-10 + 3$ $10 + (-3)$

b. $-15 + (-17)$ $-17 + (-15)$

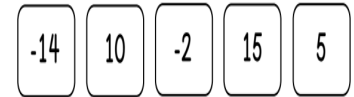
c. $32 + (-16)$ $-32 + 16$

d. $-50 + 25$ $25 + (-50)$



PROBLEM SOLVE

Cross through the card that should be eliminated so that the remaining cards have a sum of -1.



REVIEW

Tanya and Raven are each eating a chocolate bar. Tanya has eaten 65% of her chocolate bar. The portion that Raven has eaten is represented by the shaded part of the fraction bar below. Who has the greatest portion of her chocolate bar remaining? Explain your reasoning.



DESCRIBE

Write an equation to represent the situation:

"Blake owed his sister \$35. He gave her a \$20 bill, so now he only owes her \$15."

Create a real-world situation that could be represented by the equation $-14 + (-25) = -39$.



DESCRIBE	Fill in each blank with "sometimes", "always" or "never" in order to make the statement true. a. A positive integer combined with a positive integer will _____ have a sum that is negative. b. A negative integer combined with a positive integer will _____ have a sum that is less than zero. c. A negative integer combined with a negative integer will _____ have a sum that is negative.
JUSTIFY	a. Howie believes that $-27 + 13 = -13 + 27$. Is this true? Why or why not? _____ _____ b. Jacobi believes that $-19 + 22 = 22 - 19$. Is this true? Why or why not? _____ _____
PROBLEM SOLVE	Circle the two integers that would have a sum closest to -20. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">-8</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">18</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">-2</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">-10</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">11</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">-30</div> </div>
REVIEW	Keith added $12.5 + 8.6$ on the paper at the right below. a. Is Keith's solution reasonable? Why or why not? b. Explain Keith's error.

<table style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">BRIANNA'S ACCOUNT</td> <td style="width: 50%;">JOY'S ACCOUNT</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Starting Balance: -\$120</td> <td style="border: 1px solid black; padding: 2px;">Starting Balance: -\$90</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Deposit 1: \$75</td> <td style="border: 1px solid black; padding: 2px;">Deposit 1: \$23</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px;">Deposit 2: \$62</td> <td style="border: 1px solid black; padding: 2px;">Deposit 2: \$71</td> </tr> </table>	BRIANNA'S ACCOUNT	JOY'S ACCOUNT	Starting Balance: -\$120	Starting Balance: -\$90	Deposit 1: \$75	Deposit 1: \$23	Deposit 2: \$62	Deposit 2: \$71	Brianna and her sister Joy both started the month with negative balances in their bank accounts. Each sister has made two deposits since the beginning of the month as shown. After the two deposits, which sister has the greatest amount in her bank account?
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Starting Balance: -\$120	Starting Balance: -\$90								
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DESCRIBE	Hank and Tim are going on a hike. Hank is starting at an altitude of 126 feet below sea level and Tim is at an altitude 33 feet higher than Hank. The situation can be represented with the equation below: $-126 + 33 = -93$ Explain what -93 represents in the situation. _____ _____
PROBLEM SOLVE	Fill in each of the rectangles with a digit 1-5 in order to make the equation true. Each digit can only be used once. a. $-2\boxed{} + 10 = -15$ b. $-\boxed{}6 + (-3) = -49$ c. $8\boxed{} + (-27) = 54$ d. $-50 + 22 = -\boxed{}8$ e. $40 + (-\boxed{}3) = 7$
REVIEW	Label each point on the number line with the letter that is the closest approximate value. A. -12 B. 12 C. -85 D. 62 E. -55

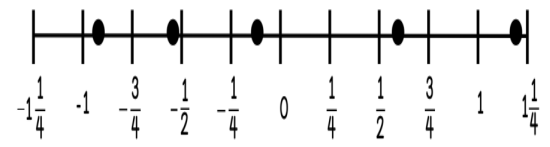
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ORDER	Circle all the expressions that have a value less than -10. a. $-9 + -13$ b. $26 + (-30)$ c. $-14 + 28$ d. $15 + (-30)$ e. $-21 + 20$ f. $-3 + (-8)$										

REPRESENT	Draw counters to represent the expression $3 + (-6)$. Then, find the sum. <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;"> <p style="text-align: center; margin: 0;">KEY</p> <p style="text-align: center; margin: 0;"> = POSITIVE</p> <p style="text-align: center; margin: 0;"> = NEGATIVE</p> </div>
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PROBLEM SOLVE	Draw counters to represent the expression $3 + (-6)$. Then, find the sum.
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REPRESENT	Draw counters to represent the expression $3 + (-6)$. Then, find the sum.
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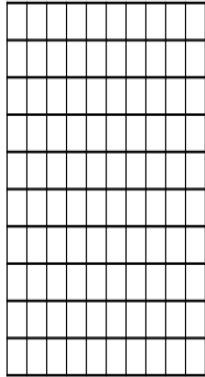
$\begin{array}{r} 12.5 \\ + 8.6 \\ \hline 98.5 \end{array}$

REPRESENT	<p>Isabelle is going to rewrite each subtraction statement as an addition statement by "adding the opposite". She has completed the first statement so far. Help her represent the remaining subtraction statements as addition statements.</p> <p>a. $-5 - 12$ b. $2 - (-19)$ c. $-28 - 10$ d. $-15 - (-7)$ e. $35 - 12$</p> <p><u>$-5 + (-12)$</u> _____ _____ _____ _____</p>
ORDER	<p>In a-d, find each difference. Then, record the letters in descending order according to their differences.</p> <p>a. $36 - 46 =$ _____ c. $-25 - (-21) =$ _____</p> <p>b. $-11 - 13 =$ _____ d. $4 - (-16) =$ _____</p> <p>_____</p>
DESCRIBE	<p>Label each statement below as true or false.</p> <p>_____ a. $9 - 5$ is the same as $9 + (-5)$.</p> <p>_____ b. $-10 - 6$ is the same as $10 + (-6)$.</p> <p>_____ c. A negative number minus a negative number will always result in a positive difference.</p> <p>_____ d. A negative number minus a positive number will always result in a negative difference.</p>
PROBLEM SOLVE	<p>For each situation, write and solve an equation to find the missing information.</p> <p>a. The lowest temperature yesterday was -4°F, and the highest temperature was 16°F. What was the difference in the high and low temperatures yesterday?</p> <p>b. Shawn has 42 points on his computer game. He loses the next round though which takes away 50 points. How many total points does Shawn now have?</p>
REVIEW	<p>Use the fraction bars below to shade the addition statement and solution to $\frac{1}{2} + \frac{1}{4}$.</p> <p> +  = </p>

JUSTIFY	<p>Mitchell starts with a negative value and subtracts a negative value. Is it possible for his solution to be a positive value? Explain.</p> <p>_____</p> <p>_____</p> <p>Liliana starts with a negative value and subtracts a positive value. Is it possible for her solution to be a positive value? Explain.</p> <p>_____</p> <p>_____</p>				
DESCRIBE	<p>Four students subtracted integers below by adding the opposite. Circle the work of the student who made an error. Then, describe the error.</p> <table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; padding: 5px;"> <p>Sam</p> $\begin{array}{r} -15 - 13 \\ -15 + (-13) \\ -28 \end{array}$ </td> <td style="border: 1px solid black; padding: 5px;"> <p>Callie</p> $\begin{array}{r} 26 - 50 \\ 26 + (-50) \\ -24 \end{array}$ </td> <td style="border: 1px solid black; padding: 5px;"> <p>Nick</p> $\begin{array}{r} -8 - (-19) \\ -8 + (-19) \\ -27 \end{array}$ </td> <td style="border: 1px solid black; padding: 5px;"> <p>Jamori</p> $\begin{array}{r} 30 - 21 \\ 30 + (-21) \\ 9 \end{array}$ </td> </tr> </table>	<p>Sam</p> $\begin{array}{r} -15 - 13 \\ -15 + (-13) \\ -28 \end{array}$	<p>Callie</p> $\begin{array}{r} 26 - 50 \\ 26 + (-50) \\ -24 \end{array}$	<p>Nick</p> $\begin{array}{r} -8 - (-19) \\ -8 + (-19) \\ -27 \end{array}$	<p>Jamori</p> $\begin{array}{r} 30 - 21 \\ 30 + (-21) \\ 9 \end{array}$
<p>Sam</p> $\begin{array}{r} -15 - 13 \\ -15 + (-13) \\ -28 \end{array}$	<p>Callie</p> $\begin{array}{r} 26 - 50 \\ 26 + (-50) \\ -24 \end{array}$	<p>Nick</p> $\begin{array}{r} -8 - (-19) \\ -8 + (-19) \\ -27 \end{array}$	<p>Jamori</p> $\begin{array}{r} 30 - 21 \\ 30 + (-21) \\ 9 \end{array}$		
PROBLEM SOLVE	<p>Fill in each rectangle with the digits 1, 2, 3 and 4 in any order to create a difference of -46. Each digit may only be used once.</p> <p>$- \begin{array}{ c } \hline \square \\ \hline \end{array} \begin{array}{ c } \hline \square \\ \hline \end{array} - \begin{array}{ c } \hline \square \\ \hline \end{array} \begin{array}{ c } \hline \square \\ \hline \end{array} = -46$</p>				
REVIEW	<p>Jen has a positive amount of money in her bank account. If she takes the current balance and multiplies it by $\frac{2}{3}$, will the account balance get larger or smaller? Explain.</p>				

REPRESENT

Use the grid to shade a representation of $0.2 + 0.03$.



JUSTIFY

Lincoln had 7.8 inches of rope and found another 6.35 inches of rope in his work shed. The work below shows how he calculated the total inches of rope that he had. Did he calculate the amount correctly? Explain your thinking.

$$\begin{array}{r} 7.80 \\ + 6.35 \\ \hline 13.15 \end{array}$$



ORDER

Solve each addition problem. Then, order the letters from least to greatest according to their solutions.

a. $5.02 + 6.7$

b. $12 + 1.75$

c. $13.8 + 0.35$

d. $7.33 + 5.9$



PROBLEM SOLVE

Camille and her friend Janie went to a coffee shop. Camille bought a latte and Janie bought a cappuccino and a muffin. How much money did the girls spend altogether?

ITEM	PRICE
Latte	\$3.65
Cappuccino	\$3.50
Pastry	\$1.95
Egg Sandwich	\$2.95
Muffin	\$1.15



REVIEW

Xavier starts with the integer -10 and multiplies it by a negative integer. Mark the statements below as true or false. If false, explain why to the right of the statement.

- _____ a. The resulting product cannot be greater than -10.
- _____ b. The resulting product must be greater than 0.
- _____ c. The resulting product cannot be less than 10.



ORDER

Shade the column with the greatest total sum.

0.5	0.35	1.45
1.5	1.25	0.45
0.3	0.5	0.6



PROBLEM SOLVE

Draw a line connecting each problem to its solution. Not all of the solutions will be used.

$15.2 + 27.89$

$13.05 + 9.5$

$30.7 + 2.01$

29.41

32.71

43.09

14

32.8

22.55



PROBLEM SOLVE

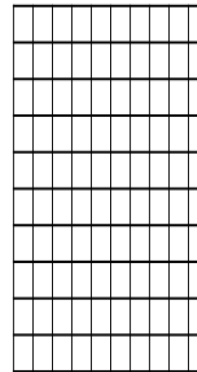
Micah is on a game show where he must pick three squares from a grid. Each square will reveal a decimal, and the sum of the three decimals cannot exceed 10 in order for Micah to win. The three decimals that Micah picked are shown. Did Micah win the game? Explain.

3.25		
		1.95
4.75		



REPRESENT

Use the grid to represent the sum of 0.85 and 0.1.



REVIEW

Solve each problem below. Then, describe any patterns you notice.

$1 \cdot \frac{1}{3} = \underline{\quad}$ $3 \cdot \frac{1}{3} = \underline{\quad}$ $6 \cdot \frac{1}{3} = \underline{\quad}$

$12 \cdot \frac{1}{3} = \underline{\quad}$ $30 \cdot \frac{1}{3} = \underline{\quad}$ $300 \cdot \frac{1}{3} = \underline{\quad}$



DESCRIBE

Heather has labeled the numerator and denominator of the fraction shown:

$$\begin{array}{c} \text{numerator} \rightarrow 5 \\ \hline 9 \leftarrow \text{denominator} \end{array}$$

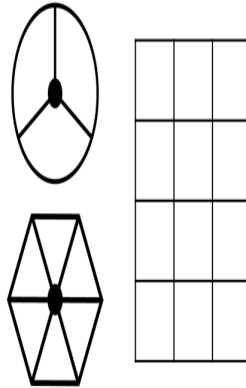
Describe what the denominator represents:

Describe what the numerator represents:



REPRESENT

Shade 2/3 of each shape below.



PROBLEM SOLVE

Fill in each numerator or denominator with a digit that creates an improper fraction.

$$\frac{7}{\square} \quad \frac{\square}{15} \quad \frac{3}{\square} \quad \frac{\square}{4}$$



DESCRIBE

Tia needs to determine which fraction below is greater.

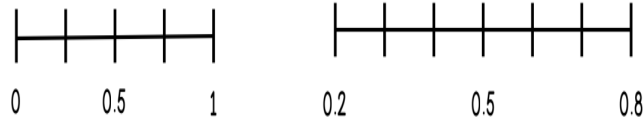
$$\frac{3}{5} \quad \frac{7}{12}$$

Describe one way that Tia can compare the two fractions:



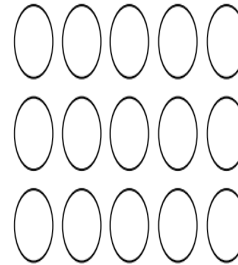
ORDER

Draw a point on each number line to show the approximate location of $\frac{2}{3}$.



REPRESENT

The circles below represent a stack of coins that Jerome dropped on the ground. If $\frac{3}{5}$ of the coins landed heads up, shade the number of coins that landed heads up.



COMPARE

Circle any fraction that has a value less than $\frac{1}{4}$.

$$\begin{array}{ccc} \frac{2}{3} & & \frac{1}{8} \\ & \frac{3}{14} & \\ \frac{6}{25} & & \frac{5}{9} \\ \frac{2}{9} & \frac{3}{5} & \end{array}$$



COMPARE

Which of the following is a true statement?

a. $\frac{8}{9} < \frac{7}{9}$ b. $\frac{1}{7} > \frac{6}{7}$
 c. $\frac{2}{11} < \frac{1}{11}$ d. $\frac{5}{13} > \frac{2}{13}$



REVIEW

Shade any rectangle that has a value of -10.

$-5(-2)$	$-8-2$	$-30 \div 3$
$-6 + (-4)$	$10(-1)$	$16 - 26$
$-50 \div (-5)$	$-9 + 1$	$-3 - 7$



REVIEW

Use the models below to shade 0.25 and 0.3. Then, circle the greater value.

