

Week 26

Warm up Week 26: Days 1-5 (see attached)

- I. The student applies Grade 6 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. Students identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics as well as use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.**

(198-199)Activity: Mastering TAKS pgs. 11-12 (independent practice – grade)
(200-203)Activity: TAKS Coach pgs. 276-277, pgs. 281-282 (independent practice – grade)
Activity: KAMICO pgs. 367-382 “Step by Step” (independent practice – grade)
(204-207)Activity: Motivation Math pgs. 131-134 (independent practice – grade)
(208-211)Activity: Motivation Math pgs. 135-138 (independent practice – grade)
(212-218)Activity: KAMICO pgs. 365-366, pgs. 396-399 (assessment – grade)

II. Extra Work / Activities:

KAMICO pgs. 383-395 “Let’s Be Reasonable” (independent practice – grade)
(219) Texas Coach pg. 213 (independent practice)

III. Homework

To be determined by the teacher on a weekly basis

TEKS: 6.11A, 6.11B

STAAR Category: 1-5

A Plan for Problem Solving

Use the four-step plan to solve each problem.

1. **GEOGRAPHY** The president is going on a campaign trip to California, first flying about 2,840 miles from Washington, D.C., to San Francisco and then another 390 to Los Angeles before returning the 2,650 miles back to the capital. How many miles will the president have flown?
2. **POPULATION** In 1990, the total population of Sacramento, CA, was 369,365. In 2000, its population was 407,018. How much did the population increase?
3. **MONEY** The Palmer family wants to purchase a DVD player in four equal installments of \$64. What is the cost of the DVD player?
4. **COMMERCIALS** The highest average cost of a 30-second commercial in October, 2002 was \$455,700. How much was this commercial worth per second?
5. **SPORTS** A tennis tournament starts with 16 people. The number in each round is shown in the table. How many players will be in the 4th round?

1st Round	16
2nd Round	8
3rd Round	4
4th Round	?

Complete the pattern.

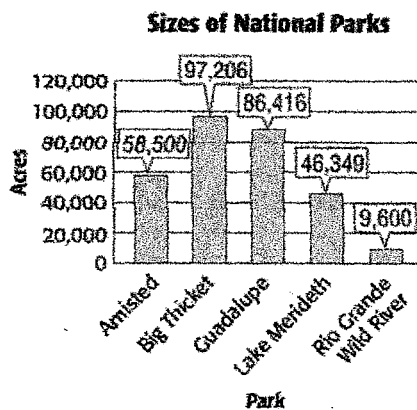
6. 2, 4, 8, 16, 32, ____
7. 16, 19, 22, 25, 28, 31, ____
8. 81, 72, 63, 54, ____
9. 5, 15, 20, 30, 35, 45, 50, ____
10. 50, 40, 45, 35, 40, 30, 35, ____, ____, ____, ____
11. 6, 12, 18, ____, ____, ____, ____

A Plan for Problem Solving

PATTERNS Complete each pattern.

1. 17, 21, 25, 29, _____, _____, _____
2. 32, 29, 26, 23, _____, _____, _____
3. 1, 2, 4, 7, _____, _____, _____
4. 64, 32, 16, 8, _____, _____, _____

5. **ANALYZE GRAPHS** Refer to the graph. How many acres smaller is Lake Meredith National Recreation Area than Big Thicket National Preserve?



6. **TRAVEL** The distance between Dallas and Beaumont is about 290 miles. Henry drove from Dallas to Beaumont at 58 miles per hour. How many hours did it take Henry to reach Beaumont?

7. **ANALYZE TABLES** The table lists the times that ferries leave the terminal every day. At what times will the next three ferries leave the terminal?

6:36 A.M.
7:11 A.M.
7:17 A.M.
7:52 A.M.
7:58 A.M.

8. **MONEY** The Wilsons bought a refrigerator and a stove for a total cost of \$745. They will pay for the purchase in five equal payments. What will be the amount of each payment?

9. **MUSIC** Luanda practices playing the piano for 24 minutes each day. How many hours does she practice in one year?

- 1** Darcy runs $\frac{1}{4}$ mile to the park. Then she runs around the track twice. The track is $\frac{3}{4}$ -mile long. Finally, she runs back home. How far does Darcy run altogether?

A 1 mile
B $1\frac{3}{4}$ miles
C 2 miles
D $2\frac{1}{4}$ miles

- 2** Margarita rides her bike 55 miles in 4 hours. How would you find the average speed she rides per hour?

F Add the number of miles she rides each hour.
G Subtract the time from the distance she rides.
H Multiply the number of miles by the total time.
J Divide the number of miles by the total time.

- 3** Colton and his friends are going to a concert. The total cost of the tickets is shared equally. Colton and his friends will take a bus that costs \$1.65 each way. Colton also plans to buy a souvenir T-shirt at the concert.

Arrange the problem-solving steps below in the correct order for Colton to find how much money he needs for the concert.

Step P: Add the cost of the T-shirt, the total cost of riding the bus, and the cost of 1 concert ticket.

Step Q: Divide to find the cost of 1 concert ticket.

Step R: Multiply to find the round-trip cost of riding the bus.

Which list shows the steps in the correct order?

A P, R, Q
B Q, R, P
C Q, P, R
D R, P, Q

- 4 Levon has \$20.00 to spend on books. The table below shows the price of each book, including tax, in his favorite series.

Bargain Books

Series	Price
Mystery	\$3.95
Adventure	\$4.50
Fantasy	\$5.25
History	\$3.75

If Levon buys 3 mystery books, how can he determine whether he has enough money left to buy a fantasy book?

- F Add \$3.95 and \$5.25.
- G Subtract the sum of \$3.95 and \$5.25 from \$20.00.
- H Multiply \$3.95 by 3.
- J Subtract the product of 3 and \$3.95 from \$20.00.
- 5 Rona writes about 3 pages in her journal every 10 days. About how many pages will Rona write in 6 months?
- A 19
- B 32
- C 54
- D Not here

- 6 Amy has 7 quarters, 3 dimes, and 4 nickels. Renzo has 5 quarters, 9 dimes, and 3 nickels. How much more money, in dollars and cents, than Amy does Renzo have?

- F \$0.02
- G \$0.05
- H \$0.12
- J \$0.15

- 7 Philip has orders for 35 jewelry boxes. He uses 22 special nails to build each jewelry box. Nails come in packages of 60. How many packages of nails will Philip need?

- A 13
- B 12
- C 11
- D 10

- 1** In 2002, four states had populations greater than 10 million. The population of Texas was about 13 million less than the population of California. The population of New York was about 3 million less than that of Texas. The population of Florida was about 1 million less than the population of New York. What information do you need to know to find the total population of the four states in 2002?

- A** The difference between the populations of California and Florida in 2002
- B** The distance between California and Texas
- C** The population of Texas in 2002
- D** The difference between the populations of Texas and Florida in 2002

- 2** Evan wants to tile a closet floor with square tiles. The tiles are 6 inches long. The closet floor is 52 inches long and 36 inches wide. What information do you need to find the number of boxes of tiles Evan needs to cover the floor?

- F** Perimeter of each tile
- G** Area of the floor
- H** Number of tiles in each box
- J** Area of each tile

- 3** Shannon and Delia order a small pizza for \$6.50, two bottles of water for \$0.89 each, and a fruit plate for \$2.50. Shannon has a coupon for \$2.00 off the pizza. If they split the total cost equally, how much does each girl pay for just the pizza?

- A** \$2.25
- B** \$3.25
- C** \$4.39
- D** Not here

- 4** Before 5 PM, movie tickets cost \$4.75. After 5 PM, tickets cost \$4.75 for children and \$6.50 for adults. At the food stand, a large popcorn costs \$4.25. A small popcorn costs \$3.50. Martina and 3 of her friends go to a movie at 3 PM. They buy 2 large popcorns. How much, in dollars and cents, do they spend in all?

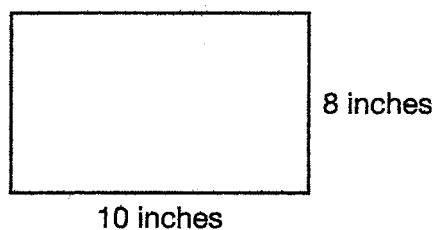
Record your answer and fill in the bubbles. Be sure to use the correct place value.

				.		
0	0	0	0		0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

- 5 Luke uses $\frac{1}{2}$ cup of apple juice and $\frac{3}{4}$ cup of orange juice to make a smoothie. He also adds 1 banana and $\frac{1}{4}$ cup of ice to the smoothie. How much juice in all does Luke use to make the smoothie?

- A $1\frac{1}{4}$ cups
- B $1\frac{1}{2}$ cups
- C $2\frac{1}{4}$ cups
- D $2\frac{1}{2}$ cups

- 6 Rachel is putting a ribbon border around the frame shown below.



The ribbon costs \$1.15 per yard. Which information will **NOT** help you find the total cost of the ribbon?

- F The shape of the frame
- G The perimeter of the frame
- H The cost of the ribbon
- J The area of the frame

- 7 Nicholas has \$120 to spend on prizes and decorations for the school carnival. He buys balloons for \$18, 24 kaleidoscopes for \$32, 5 packages of spider rings, and 8 inflatable balls for \$6. What information is needed to find the amount of money Nicholas has left to spend?

- A The cost of each balloon
- B The cost of each package of spider rings
- C The cost of each inflatable ball
- D The number of spider rings in each package

- 8 Ms. Layton has \$30 to spend on plants for her vegetable garden. Tomato plants cost \$0.79 each. Each squash plant costs \$0.20 less than a tomato plant. All prices include tax. Ms. Layton buys 12 plants. What information is needed to find the total amount she spends on the plants?

- F Cost of 1 squash plant
- G Number of tomato plants she buys
- H Tax rate on the plants
- J Cost of 1 dozen tomato plants

1. Mr. Douglas ordered T-shirts for all the students in his six choir classes.

- Two classes had 32 students.
- Three classes had 25 students.
- One class had 17 students.

How many T-shirts did Mr. Douglas order?

- (A) 192
(B) 74
(C) 148
(D) 156
2. Willis bought a large bag of fresh grapefruit at the fruit stand for \$12. The grapefruit was so good that his friends wanted to buy some grapefruit from Willis' bag. What additional information is needed to find the average price of each grapefruit in Willis' bag?
- (F) The number of friends who want to buy grapefruit
(G) The weight of the bag of grapefruit
(H) The number of grapefruit in the bag at the time of purchase
(J) The number of grapefruit each friend wants to buy
3. Royal bought lunch for himself and his two sisters at Top Burger. Royal's lunch cost \$5.63. His sisters' lunches cost \$4.75 and \$4.87. If tax was already included, which of the following shows the change Royal received from a \$50 bill?
- (A) One ten-dollar bill
One five-dollar bill
One quarter
(B) One twenty-dollar bill
One ten-dollar bill
Four one-dollar bills
Three quarters
(C) Three ten-dollar bills
One five-dollar bill
Three quarters
One dime
(D) One twenty-dollar bill
Two five-dollar bills
Two quarters
Three dimes

4. Margot and 3 friends purchased a gallon of milk for \$3.99, a dozen cupcakes at \$1.25 per cupcake, and a can of mixed nuts for \$4.07. If they split these costs evenly, which equation can be used to find c , the amount in dollars and cents each person should pay?

- (F) $c = (3.99 + 12 \times 1.25 + 4.07) \div 4$
(G) $c = (3.99 + 1.25 + 4.07) \div 4$
(H) $c = 3.99 + (12 \times 1.25) + 4.07$
(J) $c = (3.99 + 12 \times 1.25 + 4.07) \div 3$

5. Lyndon's motorcycle gets 40 miles per gallon of gasoline. Which statement is best supported by this information?

- (A) The motorcycle can travel 2,000 miles on a tank of gasoline.
(B) A trip of 100 miles would take 2 hours.
(C) If Lyndon rode from his home to a rally 80 miles away and then back again, the motorcycle would use 4 gallons of gasoline.
(D) If Lyndon rode 131 miles to Central City and then 89 miles to Natural Springs Park, the motorcycle would use 7.5 gallons of gasoline.

6. Robin is making a math game for a school project. She designs a spinner with 6 equal sections. Each section is labeled with 2, 4, or 6. What additional information is needed to find the probability of the spinner arrow landing on 6 in one spin?

- (F) The diameter of the spinner
(G) The perimeter of the spinner
(H) The number of sections labeled with 6
(J) The number of times Robin has spun a 2

7. Sandy is filling a small plastic container with sugar cubes. The sugar cubes are one-half inch on each edge. The plastic container is shaped like a rectangular prism. What missing piece of information is needed in order to find the approximate number of sugar cubes that will fit in the plastic container?

- (A) The area of the base of the container
(B) The volume of the container
(C) The perimeter of the base of the container
(D) The brand of sugar cube

Guided Practice

Name _____

Date _____

1. The students at Rolling Ridge Middle School take a school trip to NASA each spring. The principal needs to order school buses to transport the students and teachers. The seating capacity of a school bus is 66 passengers. The number of students and teachers at each grade level are:

- Grade 6 – 135 students and 6 teachers
- Grade 7 – 148 students and 6 teachers
- Grade 8 – 121 students and 5 teachers

How many school buses should the principal order for the trip?

- (A) 5 (C) 7
(B) 6 (D) 8

2. The Robinson family plans to go to the movies on Saturday afternoon. Adult tickets cost \$8.50 each, senior citizen tickets cost \$6.00 each, and children under the age of 14 pay \$5.50 each. Mr. and Mrs. Robinson, Grandma Robinson, and the three children (ages 7, 10, and 15) are all going to the movie. Which equation could be used to find t , the total cost the Robinsons will pay for movie tickets?

- (F) $t = (7 + 10 + 15) - (8.50 + 5.50 + 6.00)$
(G) $t = 3(8.50 + 6.00) + 2(5.50)$
(H) $t = 3(8.50) + 2(5.50) \div 6$
(J) $t = (2 \cdot 5.50) + (3 \cdot 8.50) + 6.00$

3. At the theater, the Robinsons bought snacks to enjoy during the movie. The snack bar prices, which include tax, are shown on the chart below.

Snack Bar Prices

Item	Small	Medium	Large
Popcorn	\$2.75	\$3.50	\$4.00
Soda	\$1.75	\$2.50	\$3.25
Nachos	\$2.25		\$3.50
Candy	All candy \$2.25		

Mr. and Mrs. Robinson shared a large bag of popcorn. Grandma got a medium soda and a candy bar. Two of the three children each chose a small bag of popcorn and a small drink while the third child got small nachos. How much change did Mr. Robinson receive from a \$20 bill?

- (A) Three one-dollar bills and 2 quarters
(B) No change
(C) A one-dollar bill
(D) Four one-dollar bills and 2 quarters

4. Maddi wants to spend her birthday money to purchase a video game. She called 3 stores to find the price of the game at each store. Toy Palace charges \$38.95, Mears Department Store sells the game for \$37.75, and T-Mart's price is \$42.50. What information is needed to determine whether or not Maddi can purchase the video game?

- (F) The price of the video game at Game Shop
(G) The amount of tax Maddi will have to pay
(H) The amount of money Maddi has to spend
(J) The number of games each store has in stock

5. Alex read a 270-page book for his book report. He began reading his book on Monday and read 1.5 hours each day. Alex finished reading his book on Saturday. Which statement is best supported by this information?

- (A) Alex spent 45 minutes each day practicing the trumpet and 1 hour completing his homework.
(B) Alex's teacher assigned the students a 10-page written report which was due on Friday.
(C) Alex read an average of 30 pages per hour.
(D) Alex thinks it will take him approximately 2 hours to write his book report.

6. Tanner's doctor said that Tanner is 60 inches tall. Which equation can Tanner use to find h , his height in feet?

- (F) $h = 12(60)$ (H) $h = \frac{12}{60}$
(G) $h = 60 - 12$ (J) $h = \frac{60}{12}$

7. Mrs. Morgan is making 5 pirate costumes for the drama club's spring performance. Each costume requires $3\frac{3}{4}$ yards of fabric and $1\frac{1}{2}$ yards of trim. The drama coach has budgeted \$75 for pirate costumes. Which expression can be used to determine the total cost of the pirate costumes?

- (A) $75 - (3.75 + 1.5)$
(B) There is not enough information to determine the cost of the pirate costumes.
(C) $5(3.75 + 1.5)$
(D) $75 + 5 \cdot 3.75 - 1.5$

1. Mrs. Rathbun is making cookies for the teachers. Her recipe uses 1 cup butter, $\frac{1}{2}$ cup powdered sugar, 2 teaspoons vanilla, 2 cups flour, and 2 cups chopped pecans. One batch of cookie dough makes about $2\frac{1}{2}$ dozen cookies. Mrs. Rathbun wants to make enough for each of the 78 teachers to have two cookies. How much flour will she need?
- (A) 8 cups (C) 16 cups
(B) 12 cups (D) 20 cups
2. Molly and her two cousins went to an amusement park. They agreed to split the cost equally. Admission tickets cost \$3.75 each, and tickets for rides cost \$1.25 each. The cousins rode 5 rides each. They also shared a jumbo bag of popcorn that cost \$6.50. Which expression can be used to find the amount in dollars and cents that each person paid?
- (F) $\frac{3(3.75 + 5 \cdot 1.25) + 6.50}{3}$
(G) $\frac{5(3.75 + 1.25) + 6.50}{3}$
(H) $(3.75 + 1.25 + 6.50) \div 3$
(J) $(1.25 \times 5) - 6.50 - 3.75$
3. The Market Basket sells cartons of fresh strawberries in two different sizes. The large carton holds 4 cups of berries and sells at 2 cartons for \$6.80. The small carton holds 2 cups of berries and sells at 3 cartons for \$5.40. Mr. Bott is making strawberry ice cream for the family picnic. What information is needed to determine the least amount Mr. Bott would pay for strawberries?
- (A) How many cups of cream are used in making the strawberry ice cream
(B) How many people like strawberry ice cream
(C) How many cups of strawberries Mr. Bott needs to make the ice cream
(D) How many different flavors of ice cream will be served at the picnic
4. Michael has 5 of every coin with a value less than 50¢. How much money does Michael have?
- (F) \$2.25 (H) \$2.00
(G) \$1.75 (J) \$2.05
5. The garden club at Hobart Jr. High is planting a square foot garden. Each participating student will have one square foot of space in the garden to plant a favorite vegetable. What information is needed to determine how many square feet of space will be used for the garden?
- (A) The perimeter of the garden
(B) The number of students who are planting tomatoes
(C) The number of days it will take for the vegetables to grow
(D) The number of students who are participating
6. Logan is training for a bicycle race. He rides his bike every afternoon after school. His average speed is 12 miles per hour. The chart below shows how far Logan rode each day for a week.
- Logan's Riding Record**
- | Day | Distance (miles) |
|-----------|------------------|
| Monday | 15.5 |
| Tuesday | 12.75 |
| Wednesday | 17.0 |
| Thursday | 14.25 |
| Friday | 19.6 |
| Saturday | 21.4 |
| Sunday | 13.5 |
- How much time did Logan ride his bike during the week?
- (F) 114 hours (H) $9\frac{1}{2}$ hours
(G) $8\frac{1}{2}$ hours (J) 12 hours
7. Miggy's mother is paying her to wash the windows in their house. Miggy found directions for making a window cleaner by mixing 2 cups of water and 1 cup of white vinegar. Miggy is using a gallon of water. How much white vinegar should she use?
- (A) 12 cups
(B) 2 quarts
(C) 2 pints
(D) 1 quart

Assessment

Name _____

Date _____

1. Kristina's car holds 18 gallons of gasoline. She is planning a trip to Vicksburg, Mississippi, which requires 20 gallons of gasoline. Since 18 rounded to the nearest ten is 20, she does not plan on stopping to refuel. Is Kristina's planning correct and why?

- Ⓐ Yes, because 18 does round to 20, so she should have enough gasoline to make the trip.
- Ⓑ No, because 18 would round to 10, which is not enough to make the trip.
- Ⓒ No, because rounding to 20 would mean that she does not have enough gasoline to make the trip without refueling.
- Ⓓ Yes, because regardless of rounding to 20 she would have enough gasoline to finish the trip without refueling.

2. Many regular-season baseball games are played at the Rangers Ballpark in Arlington. Each season over 2,500,000 fans attend a regular season game there. What additional information is needed in order to determine how many regular-season games are played at the stadium?

- Ⓐ How many people buy tickets to the games
- Ⓑ The average ticket price for each game
- Ⓒ The total capacity of the stadium
- Ⓓ The average number of attendees at each game

3. John David is mixing paint for his art class. The directions say to mix 1 part of powdered paint for every 2 parts of water. John David is pouring 6 cups of water into a bucket. Which equation can be used to find p , the amount expressed in cups of powdered paint that John David needs to add to the water?

- Ⓐ $p = \frac{6}{2}$
- Ⓑ $p = 2(6)$
- Ⓒ $p = 3\left(\frac{6}{2}\right)$
- Ⓓ $p = \frac{2}{6}(1)$

4. Makia bought $12\frac{1}{2}$ yards of fabric to make a costume for the school play. She used $5\frac{1}{3}$ yards to make the body pieces, $2\frac{7}{8}$ yards to make the sleeves, and $1\frac{3}{4}$ yards to make the leggings. Which of the following number sentences could be used to determine f , the amount of fabric remaining after Makia made the costume?

- Ⓐ $f = 12\frac{1}{2} - 5\frac{1}{3} + 2\frac{7}{8} + 1\frac{3}{4}$
- Ⓑ $f = 12\frac{1}{2} - (5\frac{1}{3} + 2\frac{7}{8} + 1\frac{3}{4})$
- Ⓒ $f = 12\frac{1}{2} + (5\frac{1}{3} + 2\frac{7}{8} + 1\frac{3}{4})$
- Ⓓ $f = 5\frac{1}{3} + 2\frac{7}{8} + 1\frac{3}{4}$

5. Carter and his mother and father went to the movies. Each ticket costs \$7 and Carter bought 2 drinks that cost \$4.25 each. They all shared a bucket of popcorn that cost \$5.50. If Carter had \$40 to spend for the movie tickets and snacks, which of the following shows the amount of money he had left over?

- Ⓐ 1 five-dollar bill
- Ⓑ 1 twenty-dollar bill
3 one-dollar bills
1 quarter
- Ⓒ 1 ten-dollar bill
3 quarters
- Ⓓ 1 ten-dollar bill
9 one-dollar bills

6. Jacob and two friends went to the State Fair and decided to split the cost evenly. They purchased 3 tickets at \$4.50 each, 1 set of ride coupons for \$20, and 2 lunch deals at \$6.50 each. Which of the following number sentences could be used to determine j , the amount that each friend spent at the State Fair?

- Ⓐ $j = \frac{(4.50 + 20 + 6.50)}{3}$
- Ⓑ $j = 3 \times 4.50 + 20 + 2 \times 6.50$
- Ⓒ $j = (4.50 + 20 + 6.50) \div 3$
- Ⓓ $j = \frac{(3 \times 4.50 + 20 + 2 \times 6.50)}{3}$

Name _____ Date _____

1. Ticket prices for the school musical were \$10 for adults and \$5 for students. Mrs. Chang bought 3 adult tickets and 4 student tickets. Read the problem-solving steps shown below. Arrange the steps in the correct order for Mrs. Chang to find the total cost for the tickets.

Step F: Multiply the cost of an adult ticket by the number of adult tickets purchased.

Step G: Record the number of adult tickets and the number of student tickets.

Step H: Find the sum of the two products.

Step I: Multiply the cost of a student ticket by the number of student tickets purchased.

Which list shows the steps in the correct order?

- Ⓐ F, G, H, I Ⓒ G, F, H, I
Ⓑ I, H, G, F Ⓓ G, F, I, H
2. Pamela and 3 friends went to the Amusement Park. The total cost of the gasoline that the four friends shared equally was \$24. Pamela spent \$7 on each of two meals and bought a figurine for \$15.79. What is the total amount in dollars and cents that Pamela spent on her trip to the Amusement Park?

Record your answer and fill in the bubbles. Be sure to use the correct place value.

Ⓐ	Ⓐ	Ⓐ	Ⓐ		Ⓐ	Ⓐ	
Ⓑ	Ⓑ	Ⓑ	Ⓑ		Ⓑ	Ⓑ	
Ⓒ	Ⓒ	Ⓒ	Ⓒ		Ⓒ	Ⓒ	
Ⓓ	Ⓓ	Ⓓ	Ⓓ		Ⓓ	Ⓓ	
Ⓔ	Ⓔ	Ⓔ	Ⓔ		Ⓔ	Ⓔ	
Ⓕ	Ⓕ	Ⓕ	Ⓕ		Ⓕ	Ⓕ	
Ⓖ	Ⓖ	Ⓖ	Ⓖ		Ⓖ	Ⓖ	
Ⓗ	Ⓗ	Ⓗ	Ⓗ		Ⓗ	Ⓗ	
Ⓘ	Ⓘ	Ⓘ	Ⓘ		Ⓘ	Ⓘ	

3. Whitney is baking cupcakes for the sixth-grade party at her school. There are 75 sixth-grade students. Whitney has already baked 4 dozen cupcakes. If she wants each student to receive exactly 2 cupcakes and have no cupcakes left over, how many more cupcakes should Whitney bake?

- Ⓐ 27 Ⓒ 110
Ⓑ 102 Ⓓ 48

4. Mrs. Washington needs to purchase 12 half-gallon containers of ice cream for the sundae social. Ready-Mart has ice cream for \$3 each, while Best Food has ice cream priced at 4 for \$10. How much will Mrs. Washington save if she purchases the ice cream at Best Food?

- Ⓐ \$10 Ⓗ \$6
Ⓑ \$4 Ⓙ \$36

5. A large square is divided into 4 smaller congruent squares. What method can be used to find the area of the large square, given the area of one of the smaller squares?

- Ⓐ Multiply the area of the large square by 4.
Ⓑ Subtract the area of a small square from the large square.
Ⓒ Multiply the area of one of the smaller squares by 4.
Ⓓ Add the area of the large square to the area of the 4 congruent squares.

6. Dan is 2 years older than Meg. Meg's age is twice Orlando's age. Orlando is 3 years younger than Kenya. If Kenya is 11 years old, how old is Dan?

- Ⓐ 18
Ⓑ 16
Ⓒ 14
Ⓓ 12

7. The table shows the distance Fergi rode her bike each day for five days.

Riding Distance

Day	1	2	3	4	5
Distance	6	8	7	10	9

Which could be the first step in finding the mean distance Fergi rode each day?

- Ⓐ Find the distance listed most often
Ⓑ Find the sum of the distances for each day
Ⓒ Multiply each distance by 4
Ⓓ Divide each distance by 4

Guided Practice

Name _____

Date _____

1. Ms. Chavez sold candles at a local craft fair. She made 36 small candles and 36 large candles. Mrs. Chavez sells the small candles for \$5 each and the large candles for \$9 each. On Saturday she sold all 36 small candles and 7 large candles. On Sunday she sold 22 large candles. Read the problem-solving steps below and arrange them in the correct order to determine how much more money Mrs. Chavez made on Saturday than on Sunday.

Step Q: Multiply 22 by 9.

Step R: Multiply 7 by 9 and 36 by 5.

Step S: Subtract 198 from 243.

Step T: Add 180 and 63.

Ⓐ T, Q, R, S

Ⓒ Q, R, S, T

Ⓑ R, T, Q, S

Ⓓ R, Q, S, T

2. Mrs. Sherman and Mrs. Collins went to a math teachers' convention. They paid \$26.50 each for gasoline and \$86.75 each for a hotel room. Mrs. Sherman purchased a book for \$12.90 while Mrs. Collins bought a math game for \$8.25. How much money did the two teachers spend on the trip?

Record your answer and fill in the bubbles. Be sure to use the correct place value.

0	0	0	0	.	0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

3. Molly is 7 years older than Cooper. Kallie is twice Cooper's age. Toby, who is 3 years younger than Cooper, just celebrated his second birthday. What are the ages of the four children?

Ⓐ Molly-12, Kallie-10, Cooper-4, Toby-2

Ⓑ Molly-11, Kallie-9, Cooper-3, Toby-2

Ⓒ Molly-11, Kallie-10, Cooper-3, Toby-2

Ⓓ Molly-12, Kallie-10, Cooper-5, Toby-2

4. Coach Renfro purchases equipment for the school tennis team. Tennis balls are sold in cans of 3 balls each. The team needs 360 tennis balls for practices and matches. A-B-C Sports sells tennis balls in cartons of 24 cans for \$51.00. Acme Sports offers the same tennis balls in cases containing 12 cans for \$27.00. How much will Coach Renfro save by purchasing from A-B-C Sports?

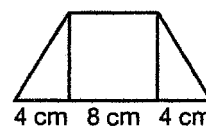
Ⓕ \$25.00

Ⓖ \$255.00

Ⓗ \$270.00

Ⓙ \$15.00

5. A trapezoid is divided into a square and 2 right triangles as shown below.



Which shows the ratio of the area of one triangle to the area of the trapezoid?

Ⓐ $\frac{1}{6}$

Ⓑ $\frac{1}{4}$

Ⓒ $\frac{1}{8}$

Ⓓ $\frac{1}{2}$

6. The table below shows the number of cups of lemonade Meredith sold each day for the 5 days she ran a lemonade stand.

Meredith's Lemonade Stand

Day	1	2	3	4	5
Cups Sold	7	5	8	5	10

Of median, mode, and range, which is equal to 5?

Ⓕ Both the median and the mode

Ⓖ Only the range

Ⓗ Both the range and the mode

Ⓙ Only the median

1. The Eastland City Council purchased 5 dozen rose bushes for the courthouse garden. Half the roses were white. Of the remaining half, one third were yellow and the rest were red. Read the problem-solving steps below. One step is not needed to find the number of red roses.

Step V: Find the product of 5 and 12.

Step W: Find the quotient of 60 and 2.

Step X: Find the sum of 30 and 10.

Step Y: Find the quotient of 30 and 3.

Step Z: Find the difference between 30 and 10.

Which step is NOT needed?

- (A) Step W (C) Step Y
 (B) Step X (D) Step Z
2. The new soccer stadium holds 121,770 people. There are 165 sections in the stadium, each with the same number of seats. How many seats are in each section?

Record your answer and fill in the bubbles. Be sure to use the correct place value.

0	0	0	0	.	0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

3. Ashleigh wants to purchase 18 tubes of paint for her art class. The local art supply store sells 9 tubes of paint for \$38.52. She compared paint prices online and found a supplier that sells 6 tubes of paint for \$24.97 with free shipping. Which shows how much money Ashleigh will save by purchasing her paint online?

(A) $(9 \cdot 38.52) - (6 \cdot 24.97)$

(B) $(2 \cdot 38.52) - (3 \cdot 24.97)$

(C) $18(38.52 - 24.97)$

(D) $(18 \cdot 38.52) - (6 \cdot 24.97)$

4. The Meals-on-Wheels chefs need 75 dozen eggs on Saturday to prepare meals for the 2,000 people who participate in the program. They have 360 eggs on hand. How many more eggs do they need?

(F) 900

(G) 1,640

(H) 540

(J) 285

5. Benny lives in the middle of a block of five houses. The white house is to the left of the blue house. The yellow house is located directly between the blue house and the gray house, which is the last house on the block. The green house is not the first house on the block. What color is Benny's house?

(A) Gray

(B) Yellow

(C) White

(D) Blue

6. The chart below shows the mileage between selected cities in Texas.

Texas Mileage Chart

	Amarillo	Bryan	Lufkin	Tyler	Waco
Abilene	286	268	349	279	184
Ft. Worth	342	169	202	132	86
Lubbock	123	432	513	443	348
Midland	240	417	498	428	333
Waco	427	86	168	153	---

Mr. Demarco drives a delivery truck. Last week he drove from Amarillo to Abilene, from Abilene to Tyler, from Tyler to Waco, from Waco to Midland, and then back to Amarillo. He made the trip in 3 days. Approximately how many miles did Mr. Demarco drive each day?

(F) 430

(G) 400

(H) 1,291

(J) 350

Assessment

Name _____

Date _____

1. If Mrs. Weaver drives at a constant speed of 75 miles per hour, which method can be used to find the number of hours it will take her to drive 300 miles?

Ⓐ Add 75 and 300
Ⓑ Subtract 65 from 300
Ⓒ Multiply 300 by 75
Ⓓ Divide 300 by 75

2. Mrs. Langston has \$35.00 to spend on fabric for the new quilt she is making. Blue fabric costs \$2.50 per yard, and green fabric costs \$3.25 per yard, including tax. If Mrs. Langston buys 8 yards of blue fabric, how can she determine how much money she has left to spend on green fabric?

Ⓐ Add \$2.50 and \$3.25
Ⓑ Subtract the product of 8 and \$2.50 from \$35.00
Ⓒ Multiply \$3.25 and 8
Ⓓ Divide 8 by \$3.25

3. Tickets for the movies cost \$7.50 for an adult and \$4.75 for a child. Coach Crow took a group of 3 adults and 2 children to the movies. He paid for all the tickets. Read the problem-solving steps shown below. Arrange the steps in the correct order for Coach Crow to find the total cost of the tickets.

Step K: Multiply the cost of a child's ticket by the number of children

Step L: Determine the number of adults and the number of children going to the movies

Step M: Multiply the cost of an adult ticket by the number of adults

Step N: Add the two products together

Which list shows the steps in the correct order?

Ⓐ K, L, N, M
Ⓑ L, M, K, N
Ⓒ N, M, L, K
Ⓓ L, N, M, K

4. Mr. and Mrs. Gunther tiled their rectangular porch using square tiles. Each box of tiles contained 30 square tiles. The rectangular porch measured 38 feet by 22 feet. What missing piece of information is needed in order to find the number of boxes of tile the Gunthers needed?

Ⓐ Area of each square tile
Ⓑ Perimeter of the box
Ⓒ Perimeter of the porch
Ⓓ Area of the porch

5. For her school orchestra's bake sale, Cassandra is baking cookies. She needs to have 30 bags of cookies with 4 cookies in each bag. If she has already baked 3 dozen cookies, how many more dozen cookies does Cassandra need to bake?

Ⓐ 36
Ⓑ 12
Ⓒ 7
Ⓓ 84

6. Carlos added 3 to the number of sides on a pentagon. He then took the sum and multiplied it by 28. Finally, Carlos divided this number by 4. What was his final answer?

Ⓐ 56
Ⓑ 14
Ⓒ 63
Ⓓ 42

7. Chenique and her 2 sisters went to Game Town. Entrance tickets cost each girl \$4. They played video games for a total of \$15. Then, Chenique played 2 games of miniature golf for \$4.25 per game. If the three sisters equally shared the total price of the video games and entrance tickets, and Chenique paid for her golf games, how much money did Chenique pay altogether?

Record your answer and fill in the bubbles. Be sure to use the correct place value.

0	0	0	0	.	0	0
1	1	1	1		1	1
2	2	2	2		2	2
3	3	3	3		3	3
4	4	4	4		4	4
5	5	5	5		5	5
6	6	6	6		6	6
7	7	7	7		7	7
8	8	8	8		8	8
9	9	9	9		9	9

Name _____

6/6.11A

Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.

- 1 Julie is using the table to compare 4 equally nutritious breakfast cereals and determine which one is the best value.

Cereal Comparisons

Cereal	Size of Box (in ounces)	Price of Box
Crispy Puffs	25	\$4.75
Raisin Crunchies	20	\$4.00
Toasted Tasties	18	\$3.25
Fruity Flakes	1	\$0.21

Which method should Julie use to figure out which cereal is the best value?

- A She should divide the price of 1 box by the number of ounces in 1 box to find the price per ounce of each cereal. She should then compare the prices per ounce of the cereals.
- B She should multiply the price per ounce of Fruity Flakes by the number of ounces in 1 box of this cereal. She should then compare the prices per box of the cereals.
- C She should compare the prices given in the table. The cereal that corresponds to the lowest price shown is the best value.
- D She should compare the sizes given in the table. The cereal that corresponds to the largest box is the best value.

- 2 Vic is building a model F-4 Phantom jet for his airplane collection. There is 1 wheel below the nose gear of the jet. Vic needs to cut a rubber strip for this wheel's tire. He measures the distance from the center of the wheel to the edge of the wheel. Then Vic multiplies this distance by 2. Lastly, he multiplies this product by 3.14 to obtain the length of the rubber strip he needs. Vic cuts a rubber strip this length. Based on his calculations, which of the following is represented by the rubber strip Vic cuts?

- A the area of the wheel
- B the radius of the wheel
- C the diameter of the wheel
- D the circumference of the wheel

- 3 Mrs. Valdez, the principal at Colby Middle School, is organizing an ice cream social for the students who volunteered at last week's open house. She estimates that each student will have $\frac{1}{2}$ pint of ice cream, and accordingly, she buys 2 gallons of ice cream. Which expression can be used to find the number of $\frac{1}{2}$ -pint servings in 2 gallons of ice cream?

- A $2 \div 4 \div 2 \div \frac{1}{2}$
- B $2 \times 4 \div 2$
- C $2 \times 4 \times 2 \div \frac{1}{2}$
- D $4 \div 2 \times \frac{1}{2}$

- 4 Mr. Carter purchases 80 feet of fencing with which he plans to fence a square area to create a pen for his pigs. What is the area, in square feet, of the largest square pen Mr. Carter can create with the fencing he purchases?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

- 5 For science class, Kevin is writing a paper on the importance of storing food at safe temperatures to prevent the growth of bacteria. He learns that bacteria continually double in number by each one's dividing itself to form 2 bacteria. He also learns that at 98.6°F , 1 common type of bacteria takes only 17 minutes to double in number. In his paper, Kevin shows that at 98.6°F , it is not too long before an initial group of 10 bacteria of this type turns into 640 bacteria! If his calculations are correct, how much time does Kevin show it takes for this growth to occur?

- A 1 hr 25 min
- B 1 hr 42 min
- C 1 hr
- D 6 hr

- 6 Bonnie is making cookies for a student-council bake sale. Her recipe for oatmeal cookies requires either $1\frac{1}{2}$ cups of white sugar or $2\frac{1}{3}$ cups of brown sugar. Her recipe for chocolate-chip cookies requires either $1\frac{2}{3}$ cups of white sugar or $2\frac{1}{4}$ cups of brown sugar. Bonnie has 9 cups of brown sugar and no white sugar. If she has all the other necessary ingredients, Bonnie can make any of the following combinations except —

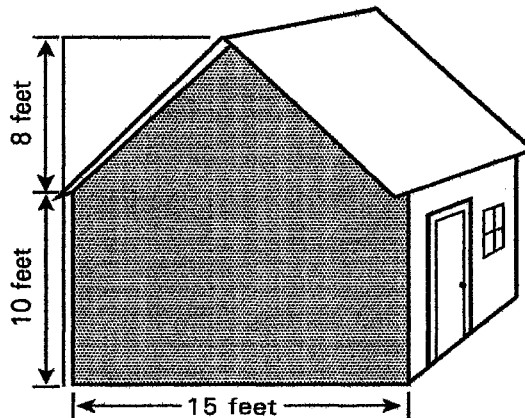
- A 4 full batches of chocolate-chip cookies and no oatmeal cookies.
- B 2 full batches of chocolate-chip cookies and 1 full batch of oatmeal cookies.
- C 1 full batch of chocolate-chip cookies and 2 full batches of oatmeal cookies.
- D 3 full batches of chocolate-chip cookies and 1 full batch of oatmeal cookies.

Name _____

6/6.11B

Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.

- 1 Rambo wants to paint the side of his house. He is trying to calculate the amount of paint he will need. The shaded region in the diagram represents the side of his house Rambo wants to paint.



To find the area of this side of his house, Rambo uses the expression $10 \times 15 + \frac{15 \times 8}{2}$. In simplifying this expression, he uses the following sequence of steps:

Step P: $150 + \frac{15 \times 8}{2}$

Step Q: $150 + \frac{120}{2}$

Step R: $\frac{270}{2}$

Step S: 135

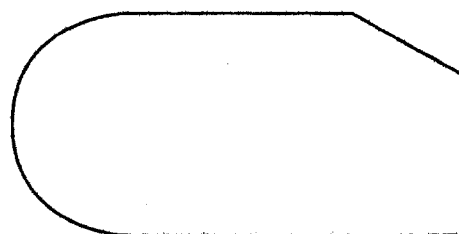
Rambo makes an error in one of his steps. In which step does Rambo make his error?

- A Step P
- B Step Q
- C Step R
- D Step S

- 2 In a record shop, Jeremy bought 7 records and 2 tapes. The least expensive record he bought was \$7.50, and the most expensive record he bought was \$11.95. The 2 tapes cost \$5.00 each. Which is a reasonable total price for the 7 records, before tax?

A \$25.00
B \$56.00
C \$65.00
D \$85.00

- 3 Johann is helping an architect design a play section in a city park. The architect asks Johann to determine what the area of the new play section will be. The construction team wants to know the area of the play section because they are going to cover it with 6 inches of sand so that it is a safe place for the children to romp and fall.



1 cm = 5 ft

If the play section is to be built as shown in the scale drawing, which would be the first step for Johann in determining this area?

- A Choose an area formula, and substitute the measurements into it.
- B Subdivide the figure representing the entire play section into simpler figures.
- C Convert from square centimeters to square feet using the scale.
- D Use the formula $C = \pi d$.

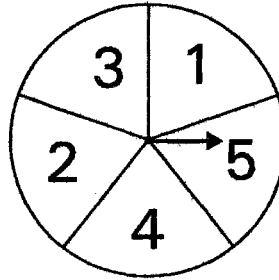
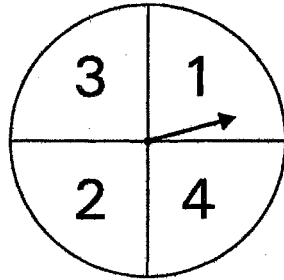
- 4** Libby, Sarah, and Jolynn are celebrating winter together. Sarah spends \$42.60 for all 3 girls to go ice skating. Jolynn pays for all 3 girls to participate in a gingerbread-house-decorating contest. Libby takes her 2 friends caroling at no expense. Since Libby's activity does not cost any money, she wants to be fair and share the expenses with Sarah and Jolynn. What additional information is needed to determine how much money Libby needs to pay each of her friends?

- A** the amount Sarah spends for each girl to go ice skating
- B** the amount Jolynn spends on the gingerbread-house-decorating contest
- C** the number of houses the girls visit while caroling
- D** the length of time the girls spend ice skating

- 5** Arnold, Beth, Chad, and Daisy went out for dessert together. Each ordered a different dessert. The menu offered apple pie, banana splits, chocolate cake, and doughnut holes. Chad ordered a dessert with fruit. Arnold ordered a dessert without fruit. None of the 4 friends ordered a dessert that begins with the same letter as his or her first name. Neither of the girls ordered chocolate cake. Based on this information, which of the following is the most reasonable?

- A** Arnold ordered chocolate cake.
- B** Beth ordered apple pie.
- C** Chad ordered doughnut holes.
- D** Daisy ordered doughnut holes.

- 6 Rosario spins 2 spinners, 1 equally divided into 4 sections and the other equally divided into 5 sections. In what order should Rosario perform the steps shown below to find the probability that if both spinners are spun one time, the sum of the numbers the spinners land on is greater than 6?



- Step V: Reduce the fraction, if possible.
Step W: Count the total number of outcomes and the number of outcomes that have a sum greater than 6.
Step X: Make an organized list of all the possible outcomes of spinning both spinners one time.
Step Y: Write a fraction in which the numerator is the number of outcomes with a sum greater than 6 and the denominator is the total number of outcomes.
Step Z: Find the sum of the numbers in each outcome.

- A X, W, Z, V, Y
B X, Z, W, Y, V
C Z, W, Y, V, X
D W, X, Z, Y, V

Lesson Practice

Choose the correct answer.

- Herbert found $\frac{2}{3}$ of a pizza left in his refrigerator. He ate $\frac{1}{8}$ of the original pizza and put the rest back. How much of the pizza is left?
 - $\frac{3}{8}$
 - $\frac{13}{24}$
 - $\frac{15}{24}$
 - $\frac{17}{24}$
- Joe has 35 model airplanes. Which of the following is a number of groups into which the planes can be divided so that no model planes are left over?
 - 2
 - 4
 - 7
 - 9
- Which pair of ratios is equivalent?
 - 4:5 and 8:10
 - 5:7 and 10:12
 - 2:8 and 4:4
 - 3:9 and 2:3
- What is the rule for the following pattern?
72, 65, 58, 51
 - add 7
 - add 9
 - subtract 9
 - subtract 7
- What is $\frac{3}{5}$ expressed as a percent?
 - 30%
 - 35%
 - 60%
 - 80%
- On a bike ride, Gabriel passed a sign that said "Beach $\frac{2}{3}$ Mile." Soon he passed another sign that said "Beach $\frac{1}{4}$ Mile." How far apart are the two signs?
 - $\frac{1}{4}$ mile
 - $\frac{1}{3}$ mile
 - $\frac{5}{12}$ mile
 - $\frac{5}{8}$ mile