OUR LADY OF VICTORY SCHOOL

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6TH, 7TH & 8TH SUMMER READING ASSIGNMENT

INCOMING 6TH, 7TH & 8TH grade students have two books assigned to read during the summer. They may choose any two books from the attached ***Jr. High Recommended Reading List.*** Students are expected to complete a "Story Map" and "Book Critique" on their first book and one of the following on their second book:

- **Book Report Cover:** Create an original book jacket for the book you read. You must include a brief summary of the book (in your own words), a picture that represents a scene or them of the book, a list of characters (minimum three) with their important traits, and a quote from the book (one you think is interesting or is something that tells about the book in some way). Note: A book jacket is like a new cover for the book. All work should be original and not just a copy of the cover. *Be creative, follow all directions, and have fun!*

- **Book Report Collage:** On your own paper or poster, assemble a collection of ten or more pictures that relate significantly to this book. These pictures may be drawn, cut from magazines, computer generated, etc. Arrange your pictures in an interesting manner, creating a collage. In addition, attach a separate piece of paper listing each picture and tell why they are important to the story. Write a short, personal response to the book you read. Your response should include why you chose to read this book, if you liked/disliked this book, would you recommend this book to someone to read, why or why not.

- **Written Book Report:** Attaches is a "Storyboard" to help in completing a written book report. The graphic organizer is used to sequence and summarize the main points of the story. If you choose to complete the written book report, you may use this template or work on separate paper. The report maybe hand written or typed. *Paragraph structure, grammar, and spelling count!*

You only have to complete one of the above items for your second book!

In summary, you will be reading two separate books, of your choice, from the recommended reading list (attached). For the first book, complete the "Story Map" and "Book Critique." For the second book, choose one of the three bulleted items above. ***Both assignments are due the first week school resumes!***

Reading is an integral part of your child's education and development. I encourage you to have your child read a minimum of 30 minutes a day. This promotes reading comprehension and vocabulary development. Students may read the newspaper, magazines, short stories, and any type of books. The public library is open during the summer – *books do not need to be purchased.*

If you have any questions regarding the summer reading assignment, please contact me at Bouchard@ fresnoolv.org or the office during their summer hours. Have a great summer!

God Bless,
Mrs. Bouchard

JUNIOR HIGH SCHOOL SUGGESTED READING

Alcott, L.M	Little Men
	Little Women
Armstrong, W.	Sounder
Buck, Pearl S.	The Big Wave
Byars, Betsy	The Summer of the Swans
	The House of Wings
Choi, Sook Nyul	Echoes of the White Giraffe
Couriander, Harold	Cowtail Switch
Dahl, Roald	Willy Wonka
DeAngell, Marguerite	Door in the Wall
Defoe, D.	Robinson Carusoe
DePaolo, Tomie	Series of Religious Stories
Dickens, Charles	Christmas Carol
Doherty, Paul	King Arthur
Doyle, Arthur C.	Adventures of Sherlock Holmes
Drucker, Olga	Kinder Transport
Forbes, Esther	Johnny Tremain
Frank, Anne	Diary of a Young Girl
George, Jean	Julie of the Wolves
	My Side of the Mountain
Gipson, Fred	Old Yeller
Grahame, K.	The Wind in the Willows
Gunther, J.	Death Be Not Proud
Herriot, J.	All Creatures Great and Small
Hinton, S.E.	The Outsiders
	Tex
	That Was this, This Is Now
Holman, Selice	Slake's Limbo
Hunt, Irene	Across Five Aprils
Juster, Norton	The Phantom Tollbooth
James, L & Collier, Chris	My Brother Sam is Dead
Jarnow, Jill	One of the Boys
Kerr, Judith	When Hitler Stole Pink Rabbit
Keyes, Daniel	Flowers for Algernon
~~L'Engle, Madeleine~~	~~Wrinkle in Time~~
Lewis, C.S.	Chronicles of Narnia
London, Jack	The Call of the Wild
	The Sea Wolf
	White Fang
~~Lowry, Lois~~	~~The Giver~~
McCullers, C.	The Hear is a Lonely Hunter
Montgomery, L.M.	Anne of Green Gables
Meyers, Walter Dean	Outside Shot
Naylor, Phyllis	Shiloh

~~O'Dell, Scott~~	~~Island of the Blue Dolphins~~
	The Black Pearl
Rawlings, Marjorie Kinnen	The Yearling
Rawls, Wilson	Where the Red Fern Grows
Reiss, Johanna	The Upstairs Room
Schaefer, Jack	Shane
~~Seldon, George~~	~~Cricket in Time Square~~
Snyder, Zilpha	Libby on Wednesday
Sperry, Armstrong	Call it Courage
Stevenson, Robert Louis	Kidnapped
	Treasure Island
Taylor, Mildred	Roll of Thunder Hear my Cry
Thomas, Jane	Courage at Indian Deep
Twain, Mark	Huck Finn
	Tom Sawyer
Verne, J	Twenty Thousand Leagues Under the Sea
Voight, Cynthia	Building Blocks
	Dicey's Song
Wells, H.G.	The Time Machine
White, E.B.	Charlotte's Web
Wilder, T.	The Bridge of San Luis Rey
Zindel, P	The Pigman

Name: _____ Date: _____

Name of Book: _____ Author: _____

Story Map

Follow the people, places and events in the story.

Setting
Time
Place

Characters
Protagonist (the main character)
Antagonist (the person or force opposing the protagonist)

Conflict
Rising Action (list three events that build suspense)
1
2
3

Climax
Explain the climax. The climax is the moment before we know the answers to the questions the conflict has created. It is the peak of suspense.

Name:

Book Critique

1. What is your overall evaluation of this book?

   _____Poor _____Fair _____Good _____Very Good _____ Excellent

2. Why do you think we read this book?

3. How would you rate this book in the following areas?

   Action _____Poor _____Fair _____Good _____Very Good _____ Excellent

   Originality _____Poor _____Fair _____Good _____Very Good _____ Excellent

   Interest _____Poor _____Fair _____Good _____Very Good _____ Excellent

   Character Development _____Poor _____Fair _____Good _____Very Good _____ Excellent

4. Elaborate on one topic in question 3. Why do you feel this way?

5. Describe how this book could be applied to your life. Describe a part of the book you identified with.

6. Detail the strengths/weaknesses of this book.
   Strengths:

   Weaknesses:

Storyboard

Name(s): _____ Date: _____ Period: _____

Name: _____ Class: _____ Date: _____ ID: A

Summer Pre-Algebra Review

____ 1. Emily pays $5 per month for a music club membership and $.50 for each song she downloads. Last month she downloaded 7 songs. Which expression shows her total cost for last month?
a. $5+0.50(7)$
b. $7\times(5+0.50)$
c. $5(7)+0.50$
d. $5(7)(0.50)$

____ 2. Which operation should be done last when evaluating $6^2-2^3\div 2$?
a. Find 6^2.
b. Find 2^3.
c. Subtract.
d. Divide.

____ 3. Which list orders the integers from least to greatest?
a. $-1,-8,-16,-28$
b. $-1,-16,-28,-8$
c. $-28,-16,-8,-1$
d. $-28,-8,-16,-1$

____ 4. Write the opposite and the absolute value of the integer 26.
a. opposite: –13, absolute value: 26
b. opposite: –26, absolute value: 26
c. opposite: 13, absolute value: 26
d. opposite: 26, absolute value: –26

____ 5. What is the value of the expression $-9+6$?
a. –15
b. –3
c. 3
d. 15

____ 6. What is the value of $22+(-15)+(-8)$?
a. –45
b. –1
c. 1
d. 45

____ 7. What is the difference $13-(-7)$?
a. –20
b. –6
c. 6
d. 20

____ 8. A hiker starts walking from a location 140 feet below sea level and ends at a location 28 feet above sea level. What is the vertical distance the hiker travels?
a. –112 feet
b. 112 feet
c. 140 feet
d. 168 feet

____ 9. When you multiply an integer greater than 1 and an integer less than 1, the product is which of the following?
a. less than zero
b. greater than zero
c. less than or equal to zero
d. greater than or equal to zero

____ 10. What is the value of $4(-3)(-5)$?
a. –60
b. –4
c. 15
d. 60

____ 11. Find the quotient $\frac{-36}{-6}$.
a. 3
b. 6
c. 12
d. 21

____ 12. Over a week, a movie theater has gains and losses of $500, –$385, –$85, $785, $625, –$99, and –$18. What is the mean of the daily gains and losses for the seven days?
a. $189
b. $221.50
c. $356.71
d. $416.17

____ 13. Which expression is equivalent to $8+6-16$?
a. $8+16-18$
b. $16-8+6$
c. $8-16+6$
d. $8-6+16$

____ 14. What property is illustrated by the equation $(y+7)+3=y+(7+3)$?
a. commutative property of addition
b. commutative property of multiplication
c. associative property of addition
d. associative property of multiplication

____ 15. Which is an appropriate expression to model the area of a room that is 17 feet by 25 feet?
a. $10(20+5)+7(10+7)$
b. $20(10+7)+5(10+7)$
c. $25(10+7)+17(20+5)$
d. $25(20+5)+17(10+7)$

____ 16. Which expression is equal to $-4(3x+4)$?
a. $-12x+4$
b. $-12x+16$
c. $-12x-16$
d. $-12x-4$

____ 17. Jane, Karen, and Susan are sisters. The difference of Jane's and Susan's ages is 3 years. Karen is 2 years older than Jane. Susan is 8 years old. How old is Karen?
a. 6 years
b. 9 years
c. 11 years
d. 13 years

____ 18. Ron correctly answered 25 of the 30 questions on his math quiz. What fraction of the questions did he miss?
a. $\frac{1}{6}$
b. $\frac{3}{4}$
c. $\frac{5}{6}$
d. $\frac{6}{5}$

____ 19. Which is a set of fractions that are equivalent?
a. $\frac{3}{10}, \frac{8}{21}$
b. $\frac{5}{16}, \frac{9}{20}$
c. $\frac{21}{24}, \frac{7}{8}$
d. $\frac{3}{5}, \frac{8}{15}$

____ 20. In a class of 28 students, 24 bought school lunch. Which fraction is less than the fraction of the students in the class who bought school lunch?
a. $\frac{24}{27}$
b. $\frac{21}{24}$
c. $\frac{18}{21}$
d. $\frac{20}{24}$

____ 21. A pine tree is $8\frac{3}{4}$ feet tall. A spruce tree is $8\frac{5}{7}$ feet tall. An oak tree is $8\frac{7}{8}$ feet tall. A cedar tree is $8\frac{1}{4}$ feet tall. Which tree is the tallest?

a. cedar tree
b. oak tree
c. pine tree
d. spruce tree

____ 22. What is the value of the expression $\frac{3}{7} - \frac{4}{7} + \frac{6}{7}$?

a. $\frac{1}{7}$
b. $\frac{5}{7}$
c. $\frac{5}{21}$
d. $\frac{13}{7}$

____ 23. Simplify the expression $\frac{9}{11} - \frac{6}{11}$.

a. $\frac{3}{11}$
b. $\frac{15}{11}$
c. $\frac{54}{121}$
d. $1\frac{4}{11}$

____ 24. What is the value of $\frac{3}{8} + \frac{5}{12} - \frac{1}{3}$?

a. $\frac{1}{8}$
b. $\frac{10}{12}$
c. $\frac{11}{24}$
d. $\frac{1}{6}$

____ 25. A book that is $1\frac{3}{4}$ inches thick is placed on top of a book that is $\frac{2}{3}$ inch thick. What is the combined thickness of the books?

a. $1\frac{1}{12}$ in.
b. $1\frac{5}{12}$ in.
c. $2\frac{4}{5}$ in.
d. $2\frac{5}{12}$ in.

____ 26. Find the product $-1\frac{1}{3} \times \frac{5}{7}$.

a. $-1\frac{5}{7}$
b. $-1\frac{1}{7}$
c. $-\frac{20}{21}$
d. $-\frac{5}{14}$

____ 27. What is the quotient $-\frac{5}{12} \div \frac{1}{6}$?

a. $-\frac{5}{2}$
b. $\frac{5}{2}$
c. $-\frac{5}{72}$
d. $-\frac{6}{18}$

____ 28. A jug contains $7\frac{1}{2}$ quarts of water. A bottle holds $\frac{3}{4}$ quart of water. How many bottles can you fill using the water from the jug?

a. 7
b. 10
c. 12
d. 15

____ 29. Which list orders the numbers from least to greatest?

a. $6\frac{3}{4}$, 6.34, $6\frac{6}{7}$, 6.74
b. 6.34, $6\frac{3}{4}$, 6.74, $6\frac{6}{7}$
c. 6.34, 6.74, $6\frac{6}{7}$, $6\frac{3}{4}$
d. 6.34, 6.74, $6\frac{3}{4}$, $6\frac{6}{7}$

____ 30. What is 0.39 expressed as a fraction?

a. $\frac{1}{3}$
b. $\frac{2}{5}$
c. $\frac{13}{33}$
d. $\frac{39}{100}$

Choose the correct answer.

____ 31. Which is greater than $3.\overline{78}$?

a. 3.787
b. 3.78
c. 3.7
d. 3.8

____ 32. Write the numbers in order from least to greatest.

$1.\overline{66}$, 1.66, 1.6, 1.665

a. $1.\overline{66}$, 1.66, 1.6, 1.665
b. 1.665, 1.6, 1.66, $1.\overline{66}$
c. 1.6, 1.66, 1.665, $1.\overline{66}$
d. 1.6, 1.66, $1.\overline{66}$,1.665

____ 33. Find the product 6.7×2.4.

a. 2.79
b. 4.30
c. 9.11
d. 16.08

Use the bank record shown to answer the questions. The beginning balance was $74.21.

Date	Transaction	Deposit	Withdrawal
6/03	Deposit	$150.00	
6/04	Books		$24.19
6/07	Movie		$13.95
6/15	Deposit	$35.61	
6/22	Concert		$17.50
6/30	Bike repair		$32.00

____ 34. Estimate the balance at the end of the month.

a. $25
b. $38
c. $111
d. $170

____ 35. Find the exact balance at the end of the month.

a. $25.29
b. $37.50
c. $110.74
d. $169.08

____ 36. After the next transaction, the new balance is $185.75. Was the transaction a deposit or withdrawal? How much was the deposit/withdrawal?

a. deposit; $16.67
b. withdrawl; $16.67
c. deposit; $75.01
d. withdrawl; $75.01

Choose the correct answer for each.

____ 37. You are painting a toy box. Paint costs $0.75 per tube, including tax. You have $17.25 to spend. How many tubes of paint can you buy?

a. 12.25
b. 23
c. 23.25
d. 24

____ 38. What is 108% written as a decimal?

a. 0.00108
b. 0.108
c. 1.08
d. 10,800

____ 39. What number is 75% of 360?

a. 15
b. 27
c. 270
d. 300

____ 40. How much is 45% of $180?

a. $45
b. $81
c. $100
d. $135

____ 41. A racetrack is 440 yards long. Approximately what percent of a mile is the racetrack's length? (Note: 1 mile = 1760 yards)

a. 8.3%
b. 25%
c. 40%
d. 52.8%

____ 42. Which of the following is a rational number?

a. $\sqrt{64}$
b. π
c. $\sqrt{3}$
d. $\sqrt{18}$

____ 43. What is the value of $\left(\frac{2}{5}\right)^{-3}$

a. $-\frac{8}{125}$
b. $\frac{8}{125}$
c. $\frac{6}{5}$
d. $\frac{125}{8}$

____ 44. What is the price of a $22 vase after it is marked up 120%?

a. $17.60
b. $26.40
c. $48.40
d. $144.00

____ 45. You save $82.50 when you purchase a bike on sale. The bike was discounted 33% off its regular price. What was the regular price of the bike?

a. $109.73
b. $110.00
c. $247.50
d. $250.00

____ 46. An increase from 10 to 20 is what percent increase?
a. 50%
b. 100%
c. 200%
d. 300%

____ 47. A decrease from 40 to 12 is what percent decrease?
a. 12%
b. 28%
c. 42%
d. 70%

____ 48. You deposit $400 into an account that earns simple interest at an annual rate of 4.8% annually. How much money will be in the account after 6 months?
a. $403.20
b. $409.60
c. $419.20
d. $515.20

____ 49. You deposit $250 into an account that earns simple interest at an annual rate of 2.5%. Which expression could be used to find the amount of money in the account after 3 years?
a. $(250)(0.25)(3)$
b. $(250)(0.025)(3)$
c. $250+(250)(0.025)(3)$
d. $250+(250)(0.25)(3)$

____ 50. Olympic timekeeping systems are accurate to 0.001 seconds. How can you write this time in seconds as a power of ten?
a. 10^{-2} seconds
b. 10^{-3} seconds
c. 10^{-5} seconds
d. 10^{-6} seconds

____ 51. Which list of numbers is in the order from least to greatest?
a. 10^{-2}, 100, 0.0001, 10^{3}
b. 0.0001, 100, 10^{-2}, 10^{3}
c. 0.0001, 10^{-2}, 100, 10^{3}
d. 0.0001, 10^{-2}, 10^{3}, 100

____ 52. What is 0.00000822 written in scientific notation?
a. 8.22×10^{-8}
b. 82.2×10^{-7}
c. 8.22×10^{-6}
d. 8.22×10^{-5}

____ 53. In 2006, there were approximately 6,500,000,000 people in the world. Which of the following is *not* another way of expressing the number 6,500,000,000?
a. 650 million
b. 6.5 billion
c. 65×10^{8}
d. 6.5×10^{9}

____ 54. The average distance from the earth to the moon is about 3.85×10^{5} kilometers. What does this number look like in standard form?
a. 3,850 km
b. 38,500 km
c. 385,000 km
d. 3,850,000 km

____ 55. Simplify the expression $-4x^{-3}$.
a. $4x$
b. $\dfrac{-4}{x^{3}}$
c. $\dfrac{1}{-4x^{3}}$
d. $-4x^{3}$

____ 56. Round $\sqrt{77}$ to the nearest whole number.
a. 7
b. 8
c. 9
d. 10

____ 57. A vacant lot has an area of 4800 ft². If the lot is square, what is the length of one side, to the nearest tenth of a foot?
a. 69.2 ft
b. 69.3 ft
c. 480 ft
d. 1200 ft

____ 58. Simplify the expression $\sqrt{300}$.
a. 90
b. $10\sqrt{3}$
c. $90\sqrt{3}$
d. $100\sqrt{3}$

____ 59. Simplify the expression $\left(\sqrt{8}\right)\left(\sqrt{10}\right)$ completely.
a. $\sqrt{18}\sqrt{80}$
b. $4\sqrt{5}$
c. $8\sqrt{5}$
d. $\sqrt{80}$

____ 60. The square root of 19 lies between which two numbers?
a. 7 and 8
b. 3 and 4
c. 10 and 11
d. 4 and 5

____ 61. What would a variable expression look like that uses the phrase *the product of 5 and a number*? Let x represent the variable.
a. $5+x$
b. $5-x$
c. $5x$
d. $\frac{5}{x}$

____ 62. You are washing cars for a fundraiser. It takes 12 minutes to wash each car. What is the equation for finding n, the number of cars you can wash in one hour?
a. $\frac{12}{n} = 60$
b. $\frac{n}{12} = 60$
c. $12n = 60$
d. $n - 12 = 60$

____ 63. What is the value of the expression $3x - 6y$ when $x = 6$ and $y = 2$?
a. 6
b. 12
c. 18
d. 20

____ 64. Simplify the expression $7x + 3y - 5x$ by combining like terms.
a. $-5x + 10y$
b. $2x + 3y$
c. $7x + 2y$
d. $7x - 2y$

____ 65. Which expression is equivalent to $3 - 2x + 3(4 - y)$?
a. $3x + 4y - x$
b. $15 - 2x - 3y$
c. $x + 3y$
d. $15 - x - 3y$

____ 66. You are reading a book that has 400 pages. You have already read 275 pages. How many more pages do you have to read to finish the book?

a. 75
b. 125
c. 225
d. 275

____ 67. Which operation should you perform to solve the equation represented by the sentence below? *The quotient of a number and eight is the opposite of twelve.*

a. Divide each side by 8.
b. Multiply each side by 8.
c. Divide each side by –8.
d. Multiply each side by –8.

____ 68. What is the solution of $-9 = 0.9x$?

a. 90
b. 9
c. –10
d. –30

____ 69. A bakery sells muffins by the dozen. One muffin costs $1.50. Which equation can you use to find the cost x of a dozen muffins?

a. $1.50x = 12$
b. $12x = 1.50$
c. $\frac{x}{12} = 1.50$
d. $x = \frac{1.50}{12}$

____ 70. What is the solution of the equation $33 = 11x + 11$?

a. –2
b. 2
c. 3
d. 22

____ 71. Carlos has $100 to spend on a CD player and 5 CDs. The CD player costs $25. He spends an equal amount of money on each CD. What is the greatest amount of money Carlos can spend per CD?

a. $10
b. $15
c. $20
d. $25

____ 72. The difference of twice a number and 2 is 16. Which equation matches this statement?

a. $2x + 2 = 16$
b. $2x - 2 = 16$
c. $x - 2 = 16$
d. $2x + 16 = 2$

____ 73. You earn $24 walking 3 dogs. You charge the same for each dog you walk. If you earned $56, how many dogs did you walk?

a. 5
b. 6
c. 7
d. 8

____ 74. Kate plans to spend no more than $25 at the bookstore. She buys a book for $16. She'll spend the remaining amount of money x on magazines. Which inequality represents the situation?

a. $16 + x \geq 25$
b. $16 + x \leq 25$
c. $25 + 16 \geq x$
d. $x \geq 25 - 16$

____ 75. Which inequality has 34 for a solution?

a. $y - 4 \geq 30$
b. $y - 4 > 30$
c. $y - 4 < 30$
d. $y + 4 \leq 30$

____ 76. Solve the inequality $\frac{1}{3}n < 2$..

a. $n < 6$
b. $n \leq 6$
c. $n > 6$
d. $n \geq 6$

____ 77. What is the solution of the inequality $-9 > 27 + 3x$?

a. $x < -12$
b. $x > -12$
c. $x \leq 6$
d. $x < 6$

____ 78. Which of the following is not a solution for the equation $y = 2x + 7$?

a. $(-1, 5)$
b. $(0, 7)$
c. $(1, 9)$
d. $(12, 20)$

____ 79. You earn 15 minutes of video game time v for every hour h you read a book. Which equation models this situation?

a. $v = 15h$
b. $vh = 15$
c. $v = 15 + h$
d. $v = \frac{15}{h}$

____ 80. What is the y-intercept of the graph $3x + y = 9$?

a. –9
b. –1
c. 3
d. 9

____ 81. Rachel needs 24 beads to make a bracelet. Red beads come in packs of 4, and blue beads come in packs of 6. The number of packs of each color you can buy is represented by the equation $4x + 6y = 24$. What does the x-intercept tell you in this situation?

a. number of packs if you buy only red beads
b. number of packs if you buy only blue beads
c. number of packs if you buy both red and blue beads
d. total cost of all beads

____ 82. A line passing through the point (–4, –5) has a slope of 0. Which point is *not* on the line?

a. (–5, 5)
b. (–125, –5)
c. (625, –5)
d. (π, –5)

____ 83. Find the slope of the line passing through (3, –4) and (3, 7).

a. 3
b. 4
c. 7
d. Slope is undefined

____ 84. You earn money to buy DVDs by mowing lawns for x dollars per lawn. One weekend you mow 4 lawns and buy 2 DVDs. Each DVD costs y dollars. You have $8 left at the end of the weekend. Which equation models this situation in slope-intercept form?

a. $-2y = -4x + 10$
b. $x = \frac{1}{2}y + 2$
c. $y = 2x + 4$
d. $y = 2x - 4$

____ 85. Which equation represents a direct variation?

a. $4y - x = 8$
b. $y - 4x = 9$
c. $y + 4x = 0$
d. $y = 6$

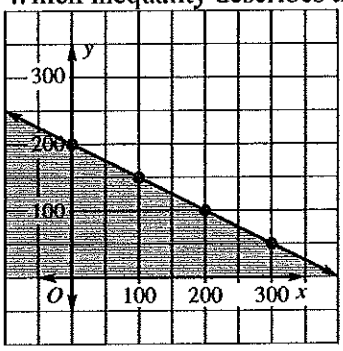
____ 86. Which statement is true about the graph of a direct variation?

a. It must pass through the point (1, 1).
b. It must pass through the point (0, 0).
c. It has a positive slope.
d. It has a negative slope.

____ 87. Which point is a solution of $6x - 5y \leq 9$?

a. $(0, -2)$
b. $(0, 0)$
c. $(2, 0)$
d. $(2, -2)$

____ 88. Which inequality describes the graph shown?



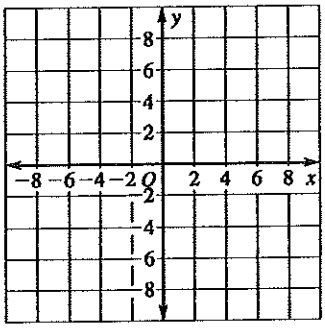
a. $y \leq \frac{1}{2}x + 200$
b. $y \geq \frac{1}{2}x + 200$
c. $y \leq -\frac{1}{2}x + 200$
d. $y \geq -\frac{1}{2}x + 200$

____ 89. You can get a premium movie membership for $20 a month. With the membership, each movie rental costs $1. Without the membership, each rental costs $5. How many movies can you rent so that the total cost of renting with membership is less than the total cost of renting without membership?

a. 5
b. 6
c. 7
d. 20

____ 90. Find the solution to the system of equations by graphing.

$$x - y = 6$$
$$-2x + y = -3$$



a. (-3, -9)
b. (9, -3)
c. (3, 3)
d. (0, 0)

____ 91. Write the product in scientific notation $(4.1 \times 10^3) \times (2.0 \times 10^2)$.

a. 8.1×10^5
b. 8.1×10^6
c. 8.2×10^5
d. 8.2×10^6

____ 92. What is the value of the expression $3^6 \cdot 3^{-9}$?

a. $\frac{1}{27}$
b. $\frac{1}{54}$
c. 27
d. 54

____ 93. Simplify the quotient $\frac{y^{14}}{y^7}$.

a. $y = 7$
b. y^7
c. y^{21}
d. $y^{14} - y^7$

____ 94. Which expression is equivalent to $\frac{x^8 \cdot x^4}{x^2}$?

a. x^2
b. x^6
c. x^{10}
d. x^{12}

____ 95. Simplify the expression $\left(-3z^3\right)^2$.

a. $-3z^6$
b. $3z^6$
c. $-9z^6$
d. $9z^6$

____ 96. Simplify the expression $\sqrt{18a^3b^6}$.

a. $3ab^3\sqrt{2a}$
b. $9b^3\sqrt{a^3}$
c. $2a\sqrt{3ab^3}$
d. $9a^3b^4\sqrt{2a}$

____ 97. Which of the following relations is *not* a function?

a. (2, 3), (3, 4), (4, 5), (5, 6)
b. (–6, 0), (3, 2), (0, 4), (3, 6)
c. (0, 4), (2, 0), (4, –4), (6, –8)
d. (8, 7), (6, 5), (4, 3), (2, 1)

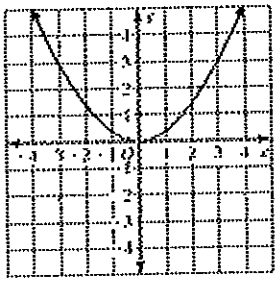
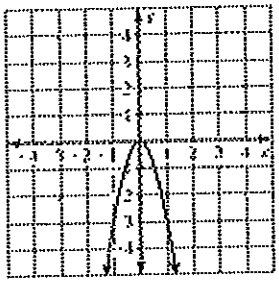
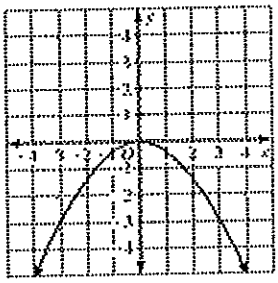
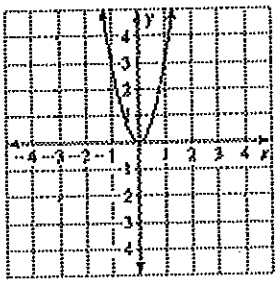
____ 98. If the domain of function rule $y = 3x$ is –2, – 1, 0, 1, and 2, what is the range?

a. –6, –3, 0, 3, 6
b. 1, 2, 3, 4, 5
c. 0, 3, 6
d. –5, –4, –3, –2, –1

____ 99. Which function rule relates x and y in the set of ordered pairs (5, 1), (10, 2), and (15, 3)?

a. $y = \frac{1}{5}x$
b. $y = 5x$
c. $y = x–4$
d. $y = x–12$

____ 100. Which graph represents the function $y = –3x^2$?

a. 
b. 
c. 
d. 

____ 101. How many kilometers is equivalent to 2000 meters?

a. 200,000 km
b. 20,000 km
c. 2 km
d. 0.002 km

____ 102. Which of the following statements is not true?

a. 2 hours and 10 minutes < 144 minutes
b. 3 days and 3 hours> 52 hours
c. 11 minutes and 38 seconds > 698 seconds
d. 4 hours and 15 minutes < 600 minutes

____ 103. Bill's heart beats 360 times in 5 minutes. Alise's heart beats at a slower rate. Which of the following could describe Alise's heart rate?

a. It beats 320 times in 4 minutes.
b. It beats 525 times in 7 minutes.
c. It beats 426 times in 6 minutes.
d. It beats 460 times in 5 minutes.

____ 104. A building foreman estimates that a job will take 2000 person-hours to complete. About how long will it take 6 workers to finish the job?

a. less than 1 day
b. 14 days
c. 84 days
d. 500 days

____ 105. Tapo is converting a measurement in mL to cups. Which conversion factors should he use?

a. $\frac{1 \text{ fl oz}}{29.573 \text{ mL}} \cdot \frac{8 \text{ oz}}{1 \text{ c}}$
b. $\frac{1 \text{ fl oz}}{29.573 \text{ mL}} \cdot \frac{1 \text{ c}}{8 \text{ oz}}$
c. $\frac{29.573 \text{ mL}}{1 \text{ fl oz}} \cdot \frac{8 \text{ oz}}{1 \text{ c}}$
d. $\frac{29.573 \text{ mL}}{1 \text{ fl oz}} \cdot \frac{1 \text{ c}}{8 \text{ oz}}$

____ 106. Your dog trots at 5 miles per hour. About how fast does your dog trot in kilometers per minute?

a. 0.134 km/m
b. 7.2 km/m
c. 186.45 km/m
d. 482.7 km/m

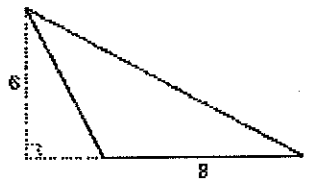
____ 107. The pencil sharpener is the midpoint of the segment formed by the windowsill. The distance from one edge of the windowsill to the pencil sharpener is 14 inches. How long is the windowsill?

a. 7 in
b. 14 in
c. 28 in
d. 42 in

____ 108. In a drawing, $\overrightarrow{AB}$ bisects $\angle CAD$. The measure of $\angle CAB$ is 66°. What is the measure of $\angle BAC$?

a. 33°
b. 66°
c. 132°
d. 180°

____ 109. Use the figure below.



Find the area of the triangle.

a. 14 units
b. 24 units
c. 48 units
d. 62 units

____ 110. A triangle has an area of 6 square feet. Which measurements *cannot* be the base length b and height h of the triangle?

a. $h = 1\text{ ft}, b = 12\text{ ft}$
b. $h = 6\text{ ft}, b = 2\text{ ft}$
c. $h = 4\text{ ft}, b = 6\text{ ft}$
d. $h = 4\text{ ft}, b = 3\text{ ft}$

Name: _____

____ 111. Determine whether a triangle with side lengths of 5, 8, and 12 is a right triangle.

a. Yes, $5^2 + 8^2 = 12^2$
b. No, $5^2 + 8^2 \neq 12^2$
c. No, $5^2 + 8^2 > 12^2$
d. Yes, $5^2 + 8^2 \leq 12^2$

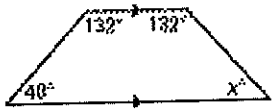
____ 112. A 16-foot ladder rests against the side of your school. The base of the ladder is 4 feet away from the school. About how high above the ground is the top of the ladder?

a. 15.5 ft
b. 16.5 ft
c. 20 ft
d. 240 ft

____ 113. What is the perimeter of a right triangle whose leg lengths are 7.5 inches and 18 inches? Round to the nearest tenth of an inch.

a. 19.5 in.
b. 38.1 in.
c. 45 in.
d. 135 in.^{2}

____ 114. Find the value of x in the quadrilateral.

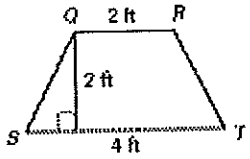


a. 20°
b. 48°
c. 90°
d. 132°

____ 115. What is the area of a parallelogram with a base of 18 feet and a height of 14 feet?

a. 64 ft^2
b. 126 ft^2
c. 252 ft^2
d. 504 ft^2

____ 116. The dimensions of a trapezoid $QRST$ are shown below. Find the area of the trapezoid.



a. 4 ft^2
b. 6 ft^2
c. 8 ft^2
d. 12 ft^2

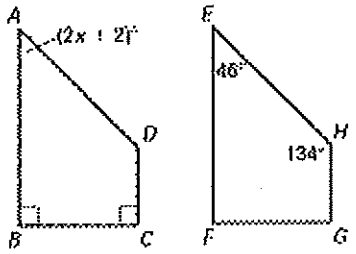
____ 117. The wheels on John's bike have a diameter of 26 inches. What is the circumference of the wheels? Use 3.14 for π..

a. 13 in.
b. 26 in.
c. 62.8 in.
d. 81.64 in.

____ 118. You have a circular rug with a diameter of 10 feet. Find the area of the rug.

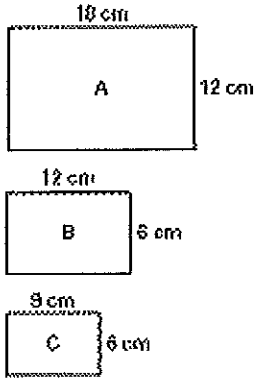
a. 15.7 ft^2
b. 31.4 ft^2
c. 78.5 ft^2
d. 314.1 ft^2

____ 119. Polygon $ABCD \cong$ polygon $EFGH$. Find the value of x.



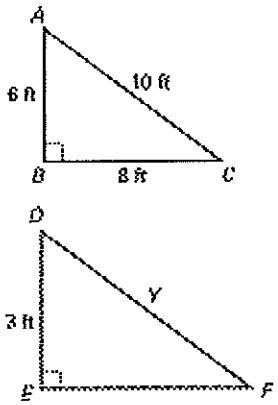
a. 10
b. 12
c. 22
d. 23

____ 120. Which of the rectangles are similar?



a. A and B
b. A and C
c. B and C
d. none are similar

____ 121. In the diagram, $\Delta ABC \sim \Delta DEF$. What is the value of y?



a. 4 ft
b. 5 ft
c. 16 ft
d. 20 ft

Name: _____

____ 122. ΔABC has vertices $A(-3, 4)$, $B(-1, 1)$, and $C(-4, 1)$. Find the vertices of the triangle's image after ΔABC is shifted left 3 units and up 2 units.

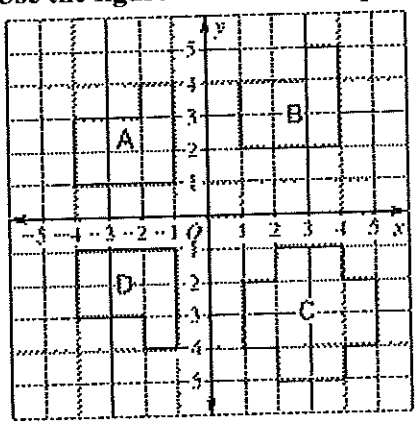
a. $A = (0,6), B = (2,3), C = (-1,3)$

b. $A = (-6,6), B = (-4,3), C = (-7,3)$

c. $A = (-1,1), B = (1,-2), C = (-2,-2)$

d. $A = (-1,7), B = (1,4), C = (-2,4)$

Use the figure to answer the question.



____ 123. Which figure is a reflected image of figure D?

a. figure A
b. figure B
c. figure C
d. none

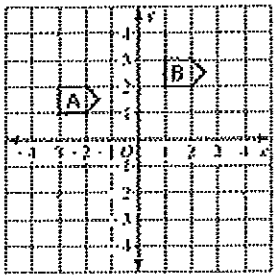
____ 124. How many lines of symmetry does figure C have?

a. 0
b. 1
c. 2
d. 4

____ 125. ΔDEF is reflected in the y-axis to form $\Delta D'E'F'$. The coordinates of point D are $(-2,5)$. What are the coordinates of D'?

a. $(2,5)$
b. $(2,-5)$
c. $(-2,5)$
d. $(-2,-5)$

____ 126. Which transformation makes figure B the image of figure A?



a. $(x,y) \rightarrow (x+4,y+1)$
b. $(x,y) \rightarrow (x-4,y-1)$
c. reflection in the y-axis
d. 90° rotation

____ 127. *TUVW* is a dilation of *PQRS*. *PQRS* has vertices *P*(–1, 2), *Q*(2, 2), *R*(2, –2), and *S*(–2, –1). *TUVW* has vertices *T*(–3, 6), *U*(6, 6), *V*(6, –6), and *W*(–6, –3). What is the scale factor?

a. $\frac{1}{3}$
b. 2
c. 3
d. 4

____ 128. A necklace has 8 green beads for every 5 blue beads. The necklace has 25 blue beads. Which proportion can you use to find how many green beads are in the necklace?

a. $\frac{25}{n} = \frac{8}{5}$
b. $\frac{n}{25} = \frac{5}{8}$
c. $\frac{n}{8} = \frac{5}{25}$
d. $\frac{25}{n} = \frac{5}{8}$

____ 129. The scale on a map is $\frac{1}{4}$ inch: 15 miles. The distance from Center City to Springfield is about 2 inches on the map. About how far is it from Center City to Springfield?

a. 15 miles
b. 60 miles
c. 120 miles
d. 150 miles

Use this information to answer the question.
You have a photo that measures 3 inches wide by 4 inches long. You want to enlarge it so the photo is 6 inches long.

____ 130. Find the scale factor.

a. .5 in.
b. 1.5 in.
c. 2 in.
d. 3 in.

____ 131. What will be the width of the enlarged photo?

a. 2 in.
b. 4.5 in.
c. 5.5 in.
d. 6 in.

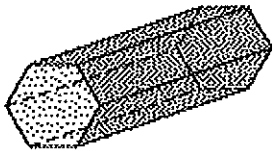
____ 132. Plane x is perpendicular to plane y. What is the intersection of planes x and y?

a. A point
b. A line
c. A plane
d. Plane x and plane y do not intersect.

____ 133. What kind of lines always intersect?

a. parallel lines
b. skew lines
c. coplanar lines
d. perpendicular lines

Use the figure to answer the question.



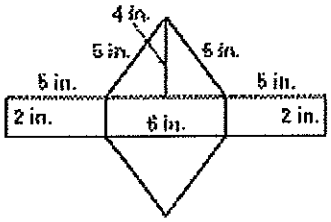
____ 134. Which describes the solid above?

a. pentagonal prism
b. hexagonal prism
c. hexagonal pyramid
d. octagonal prism

____ 135. How many faces, edges, and vertices does the solid have?

a. faces: 8; edges: 18; vertices: 12
b. faces: 8; edges: 12; vertices: 18
c. faces: 12; edges: 8; vertices: 18
d. faces: 18; edges: 12; vertices: 8

____ 136. A net of a solid is shown. Find the surface area of the solid.



a. 34 in.^{2}
b. 65 in.^{2}
c. 46 in.^{2}
d. 56 in.^{2}

____ 137. A cubic toy box has side lengths of 3 feet. What is the least amount of wrapping paper needed to cover the surface of the entire box?

a. 18 ft^2
b. 36 ft^2
c. 54 ft^2
d. 108 ft^2

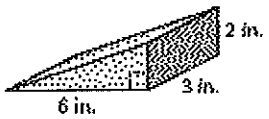
____ 138. What is the surface area of a square pyramid with a base side length of 6 inches and a slant height of 5 inches?

a. 60 in.^{2}
b. 85 in.^{2}
c. 96 in.^{2}
d. 110.5 in.^{2}

____ 139. Approximate the lateral surface area of a cone-shaped paper cup with an open base. The radius of the base is 1 inch and the slant height is 3.75 inches.

a. 11.8 in.^{2}
b. 14.9 in.^{2}
c. 23.6 in.^{2}
d. 36.0 in.^{2}

____ 140. How many cubic inches of wood are in the building block shown?



a. 12 in.^3
b. 18 in.^3
c. 36 in.^3
d. 72 in.^3

____ 141. A food company is deciding between two types of covered tin containers. One is a cylinder with a height of 4.5 inches and a diameter of 3 inches. The other is a rectangular prism with a length of 3.5 inches, a width of 2 inches, and a height of 4 inches. Tin costs $.02 per square inch. Which container costs less to make?
a. The cylinder costs $.03 less
b. The prism costs $.03 less
c. The cylinder costs $.08 less
d. The prism costs $.08 less

____ 142. A rectangular prism is 3 feet long by 3 feet wide by 2 feet high. What happens to the volume of the prism when each dimension is doubled?
a. The volume is cut in half.
b. The volume is multiplied by 2.
c. The volume is multiplied by 4.
d. The volume is multiplied by 8.

____ 143. Each of four plastic containers has a height of 8 inches. Which has the greatest volume?
a. a cone with diameter 4 inches
b. a cylinder with diameter 4 inches
c. a square pyramid with base side length 5 inches
d. a rectangular pyramid with base side lengths 4 inches and 5 inches

____ 144. A rectangular prism has a surface area of 184 cm^2. You build a larger, similar rectangular prism, using a scale factor of 1 : 3. What is the surface area of the rectangular prism you build?

a. 61.3 cm^2
b. 552 cm^2
c. 1656 cm^2
d. 4968 cm^2

____ 145. Two soup cans are similar solids. The surface area of the smaller can is 16 square inches. The surface area of the larger can is 81 square inches. What is the scale factor of the smaller can to the larger can?
a. 4 : 9
b. 1 : 2
c. 9 : 4
d. 4 : 13

____ 146. Some students rated a movie on a scale of 1 to 10. Their ratings were: 5, 3, 10, 10, 4, 6, 7, 8, and 4. What is the median rating?
a. 5
b. 6
c. 7
d. 10

____ 147. Which has the same value as the median of the following data set: 32, 27, 15, 27, 27, 17, and 29?
a. mean
b. mode
c. range
d. none

____ 148. Ten students take a quiz with 20 questions. Their scores for correct answers are shown below. Which measures best represent the data?
1, 17, 18, 18, 19, 19, 19, 19, 20, 20

a. mean and median
b. mode and median
c. mean and mode
d. mean, median, and mode

____ 149.
Choose an appropriate display for the data.

Response	Percent
Blue	40%
Green	25%
Red	35%

a. single bar graph
b. circle graph
c. line graph
d. triple bar graph

____ 150. You asked 60 students about their favorite school lunch item. Fifteen students responded that their favorite item was pizza. On a circle graph showing this data, what is the angle measure for the section that represents pizza?

a. 15
b. 24
c. 25
d. 90

Use the following information to answer the question.
The data shows the heights, in meters, of some of the tallest buildings in the world.
344, 300, 319, 307, 369, 320, 303, 348, 346, 305, 312, 321, 346, 322, 310, 325

____ 151. Which interval has the greatest frequency?

a. 300 - 320
b. 320 - 340
c. 340 - 360
d. 360 - 380

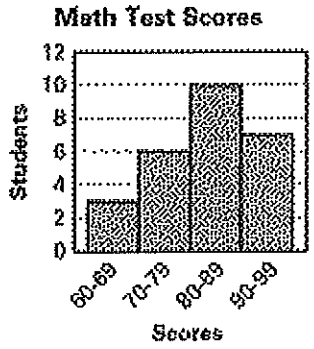
____ 152. Which value has the greatest frequency?

a. 300
b. 320
c. 346
d. 369

____ 153. What is the frequency of the interval 340 - 360?

a. 2
b. 4
c. 6
d. 8

____ 154. The histogram shows the math test scores of 26 students. How many students scored between 80 and 99?



a. 7
b. 17
c. 23
d. 26

____ 155. When the numbers 17.8, 18.7, and 19.2 are plotted on a stem-and-leaf plot, which number is *not* a leaf?

a. 2
b. 18
c. 7
d. 8

____ 156. The number of minutes that 7 phone calls placed in November lasted was 12, 17, 30, 29, 25, 32, and 11. The number of minutes that 7 phone calls placed in December lasted was 47, 19, 21, 33, 13, 28, and 38. What would a stem and leaf plot for the two months of data look like?

a.

Minutes on Phone

Nov		Dec
1 2 7	1	3 9
5 9	2	1 8
0 2	3	3 8
	4	7

c.

Minutes on Phone

Nov		Dec
1	1 2 3 7 9	1
2	1 5 8 9	2
3	0 2 3 8	3
4	7	4

b.

Minutes on Phone

Dec		Nov
1 2 7	1	3 9
5 9	2	1 8
0 2	3	3 8
	4	7

d.

Minutes on Phone

Nov	Dec
11 12 17	13 19
25 29	21 28
30 32	33 38
	47

Use the following information to answer the question.

20	6
21	3 8
22	1 6 7 9
23	0 2 4

Key: 23|4 = 234

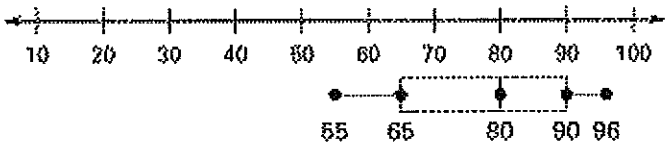
____ 157. What is the range of the data?

a. 2.8
b. 3
c. 9
d. 28

____ 158. Which interval has the most data values?
a. 200-209
b. 210-219
c. 220-229
d. 230-239

____ 159. What is the median of the data?
a. 225
b. 226
c. 227
d. 230

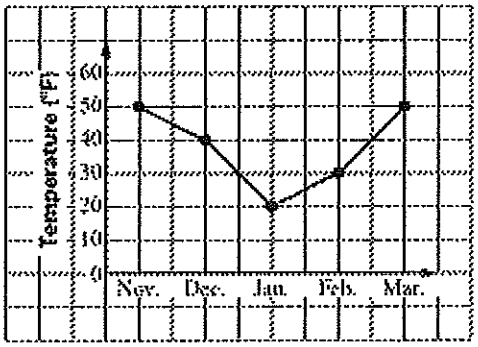
Use the following information to answer the question.
The box-and-whisker plot displays data on semester exam test scores.



____ 160. What was the highest score earned on the test?
a. 80
b. 90
c. 96
d. 100

____ 161. What was the median score?
a. 77.5
b. 80
c. 85
d. 90

____ 162. The line graph shows the average temperature over five months. What is the mean of the data?



a. 35°F
b. 38°F
c. 40°F
d. 50°F

____ 163. A scatter plot of the number of cars sold each month from January through June shows a positive relationship. Which conclusion is valid based on the plot?
a. The most cars are sold in January.
b. As months pass, more cars are sold.
c. The most cars are sold in July.
d. As months pass, fewer cars are sold.

____ 164. The table below shows the numbers of members in a health club for the first six years.

Years x	1	2	3	4	5	6
Members y	150	250	300	400	45	600

What is the correlation between x and y?

a. positive correlation
b. negative correlation
c. no correlation
d. cannot be determined

____ 165. The height of a maple seedling that starts out at 2 feet tall can be found using the polynomial $2t^2 + 2$, where t is its age in years. How tall is the maple seedling after 2.5 years?

a. 6.25 ft
b. 8.25 ft
c. 12.5 ft
d. 14.5 ft

____ 166. An equilateral triangle has side lengths of $2x - 3$. Its perimeter is 51 inches. What is the value of x?

a. 7 in.
b. 10 in.
c. 24 in.
d. 27 in.

____ 167. Simplify the polynomial $2(x+3) - 4\left(x^2 - 3x\right)$.

a. $-4x^2 + 14x + 6$
b. $-4x^2 - 10x + 6$
c. $-2x^2 + 12x + 6$
d. $-2x + 6 - 4x^2 + 12x$

____ 168. Simplify the expression $\left(-2w^2\right)(4 - w)$.

a. $-6w^2$
b. $2w^3 + 8w^2$
c. $2w^3 - 8w^2$
d. $6w^2$

____ 169. Simplify the expression 3a2(2a + 3b - b2).

a. $6a^3 + 3b - b^2$
b. $6a^2 + 9a^2b - 3a^2b^2$
c. $2a^3 + 3a^2b - a^2b^2$
d. $6a^3 + 9a^2b - 3a^2b^2$

____ 170. The answer below is incorrect. Correct the error(s) made in multiplying the binomials and find the correct answer.

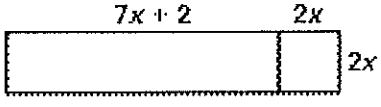
$(2x - 2)(7 - x)\ 2x \cdot 7 + 2x \cdot x + (-2) \cdot 7 - 2 \cdot x$

$14x + 2x^2 - 14 - 2x$

$2x^2 + 12x - 14$

a. $-2x^2 + 14x - 16$
b. $-2x^2 + 16x - 14$
c. $-2x^2 + 16x + 14$
d. $2x^2 + 16x - 14$

____ 171. Which product gives the area of the rectangle-square combination?



a. $14x^2 + 4x$
b. $18x^2 + 4x$
c. $22x + 4$
d. $81x^2 + 36x + 4$

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Answer Key

1. A
2. C
3. C
4. B
5. B
6. B
7. D
8. D
9. C
10. D
11. B
12. A
13. C
14. C
15. B
16. C
17. D
18. A
19. C
20. D
21. B
22. B
23. A
24. C
25. D
26. C
27. A
28. B
29. D
30. D
31. D
32. C
33. D
34. D
35. D
36. A
37. B
38. C
39. C
40. B
41. B
42. A
43. D
44. C
45. D
46. B
47. D
48. B
49. C
50. B
51. C
52. C
53. A
54. C
55. B
56. C
57. B
58. B
59. B
60. D
61. C
62. C
63. A
64. B
65. B
66. B
67. B
68. C
69. C
70. B
71. B
72. B
73. C
74. B
75. A
76. A
77. A
78. D
79. A
80. A
81. A
82. A
83. D
84. D
85. C
86. B
87. B
88. C
89. A
90. A
91. C
92. A
93. B
94. C
95. D
96. A
97. B
98. A
99. A
100. B
101. C
102. C
103. C
104. B
105. B
106. A
107. C
108. B
109. B
110. C
111. B
112. A
113. C
114. B
115. C
116. B
117. D
118. C
119. C
120. B
121. B
122. B
123. A
124. D
125. A
126. A
127. C
128. D
129. C
130. A
131. B
132. B
133. D
134. B
135. A
136. D
137. C
138. C
139. A
140. B
141. A
142. D
143. B
144. C
145. A
146. B
147. B
148. B
149. B
150. D
151. A
152. C
153. B
154. B
155. B
156. A
157. D
158. C
159. B
160. C
161. B
162. B
163. B
164. A
165. D
166. B
167. A
168. C
169. D
170. B
171. B