Dr. William H. Horton School

2019 Summer Math Packet

4th Grade

_____

Name

5. The stem-and-leaf plot shows the points scored by Jason in nine basketball games. *(Lesson 5.3)*

Jason's Scores	
Stem	**Leaves**
1	0 2 9
2	3 6 6 7
3	4
4	0

What is the outlier of the set of data?

(A) 40 (B) 26

(C) 23 (D) 10

6. Peter draws one of these number cards from a bag. *(Lesson 5.5)*

4	1	12	7	23	10

What is the probability that he draws a number less than 10?

(A) $\frac{1}{2}$ (B) $\frac{1}{3}$

(C) $\frac{1}{4}$ (D) $\frac{1}{6}$

7. Subtract $\frac{2}{4}$ from $\frac{7}{12}$. Express your answer in simplest form. *(Lesson 6.2)*

(A) $\frac{1}{12}$ (B) $\frac{2}{15}$

(C) $\frac{2}{5}$ (D) $\frac{11}{15}$

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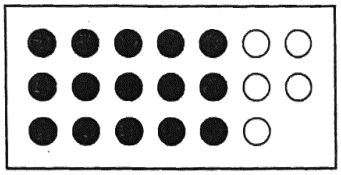
8. $4\frac{3}{5} =$ _____ *(Lesson 6.3)*

(A) $\frac{12}{5}$ (B) $\frac{20}{5}$

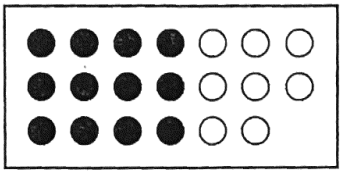
(C) $\frac{23}{5}$ (D) $\frac{43}{5}$

9. Which of the shaded parts represents $\frac{4}{5}$ of a set? *(Lesson 6.7)*

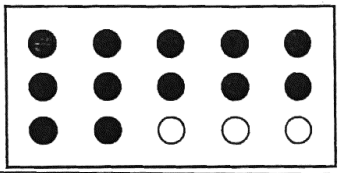
(A)



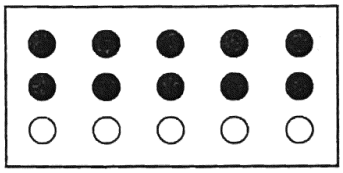
(B)



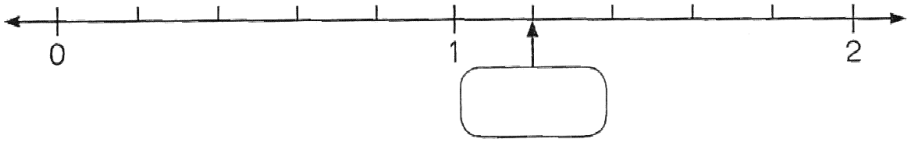
(C)



(D)



10.



The arrow is pointing at _____. *(Lesson 7.1)*

(A) 0 (B) 1.2

(C) 1.3 (D) 4

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11. Ava's mass is 45.0 kilograms when rounded to 1 decimal place. What is her least possible mass? *(Lesson 7.4)*

(A) 45.01 kilograms
(B) 44.95 kilograms
(C) 44.99 kilograms
(D) 44.55 kilograms

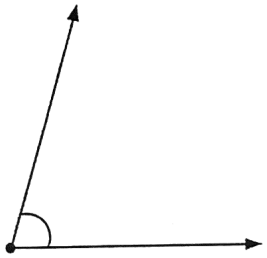
12. 0.55 is not equal to _____. *(Lesson 7.5)*

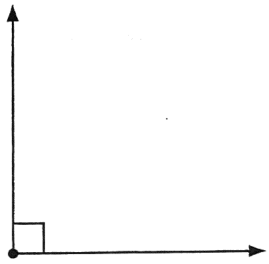
(A) $\frac{11}{20}$
(B) $\frac{55}{100}$
(C) $\frac{550}{1,000}$
(D) $\frac{55}{10}$

13. 4.6 – 0.46 is equal to _____. *(Lesson 8.2)*

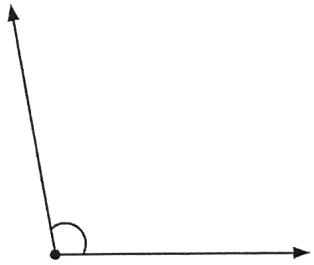
(A) 0
(B) 4.14
(C) 4.20
(D) 4.26

14. Which of these angles is an acute angle? *(Lesson 9.1)*

(A)


(B)


(C)

(D)


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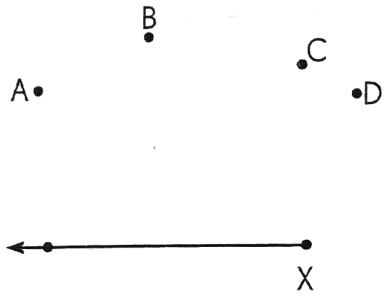
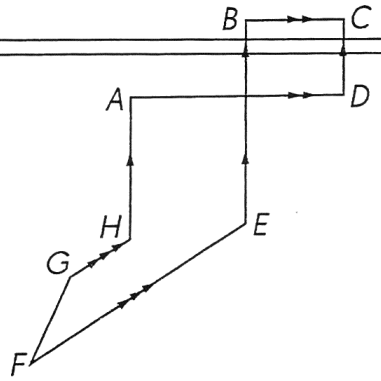
15.



Sam needs to draw an angle of 125° from point X.
He must join point X to point _____. *(Lesson 9.2)*

Ⓐ A Ⓑ B
Ⓒ C Ⓓ D

16. Refer to the figure to answer Exercises 15 and 16.



Which line segment is perpendicular to $\overline{AH}$? *(Lesson 10.1)*

Ⓐ HG Ⓑ BE
Ⓒ FE Ⓓ AD

17. Which line segment is parallel to $\overline{CD}$? *(Lesson 10.2)*

Ⓐ AD Ⓑ GH
Ⓒ BE Ⓓ FG

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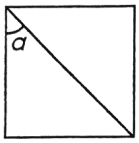
18. In the square below, find the measure of $\angle a$. *(Lesson 11.2)*

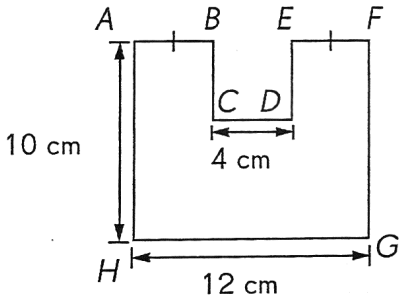


(A) 30°
(B) 45°
(C) 60°
(D) 90°

19. The perimeter of a rectangle is 24 centimeters.
The length of one of its sides is 5 centimeters.
What is the area? *(Lesson 12.1)*

(A) 7 cm^2
(B) 14 cm^2
(C) 35 cm^2
(D) 49 cm^2

20. All line segments on the figure meet at right angles.
Find *EF*. *(Lesson 12.1)*



(A) 4 cm
(B) 6 cm
(C) 8 cm
(D) 10 cm

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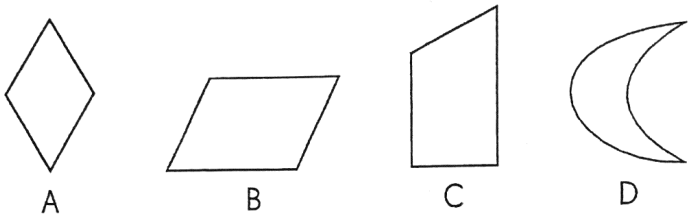
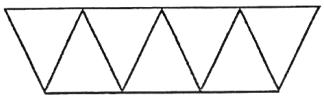
21. Which pair of figures are symmetric? *(Lesson 13.1)*



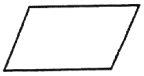
(A) A and B
(B) B and C
(C) C and D
(D) D and A

22. What is the repeated shape used in the tessellation? *(Lesson 14.1)*



(A)
(B)
(C)
(D)

23. Which of these shapes has rotational symmetry? *(Lesson 13.2)*

(A) 
(B)
(C)
(D)

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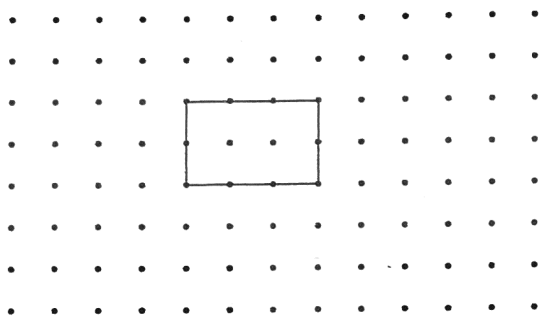
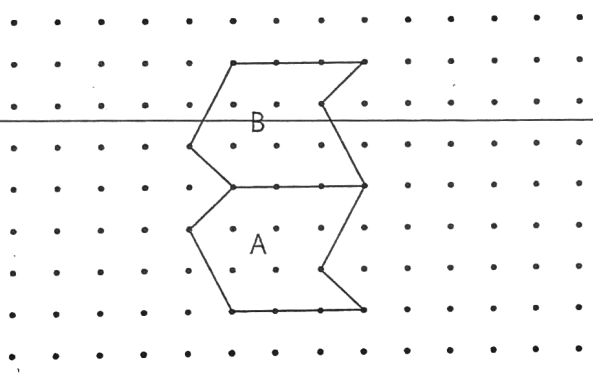
24. This shape can be tessellated by _____. *(Lesson 14.2)*



(A) sliding
(B) rotation
(C) flipping
(D) All of the above

25.



From position A to B, the unit shape has been _____.

(A) slid
(B) rotated
(C) flipped
(D) none of the above

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Short Answer

Read each question carefully. Write your answers in the space given. Give your answers in the correct units.

26. I am a number between 30 and 50. I am a multiple of 8.
My greatest common factor with 25 is 5.
What number am I? *(Lessons 2.2 and 2.3)*

_____

27. The table shows the number of marbles Anthony and Michelle have. Complete the table and answer the questions. *(Lesson 4.1)*

	Red Marbles	Blue Marbles	Total
Anthony	18	26	
Michelle	37		61

a. What was the total number of red marbles?

_____

b. What fraction of the total number of marbles were blue?

_____

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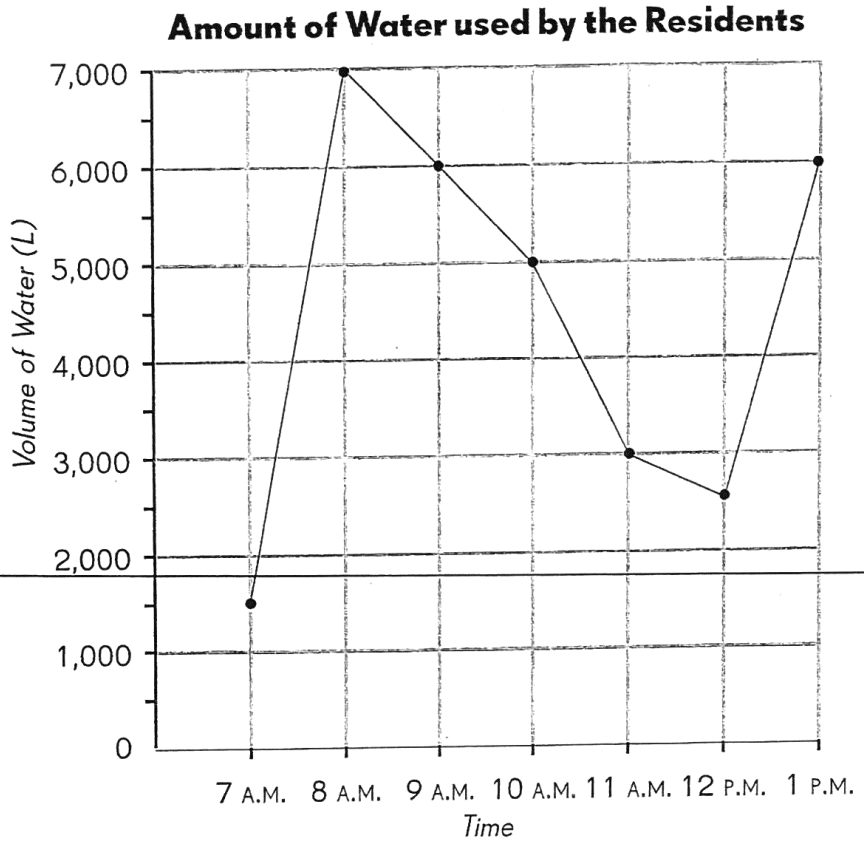
28. The graph shows the amount of water used by the residents of an apartment block over a morning. *(Lesson 4.3)*



a. At which two times was the same amount of water used?

b. At what time was the amount of water used twice that used at noon?

29. A bag has 5 pink balls, 8 yellow balls, and 4 blue balls. What is the probability of drawing a pink ball from the bag? *(Lesson 5.5)*

_____

30. What is $\frac{7}{12} - \frac{2}{6}$? Express your answer in simplest form. (Lesson 6.2)

_____

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31. Express $\frac{30}{7}$ as a mixed number. *(Lesson 6.5)*

_____

32. Find the difference between $\frac{5}{8}$ and 3. *(Lesson 6.6)*

_____

33. How many grey squares must be replaced by white squares so that $\frac{2}{3}$ of the total number of squares are grey? *(Lesson 6.7)*

_____

34. What is the number in the box? *(Lesson 7.2)*

$6.34 = 6 + 0.3 + \square$

_____

35. Li Li is 1.85 meters tall. Round her height to the nearest tenth of a meter. *(Lesson 7.4)*

_____

36. Express $5\frac{6}{25}$ as a decimal. *(Lesson 7.5)*

_____

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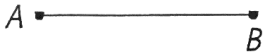
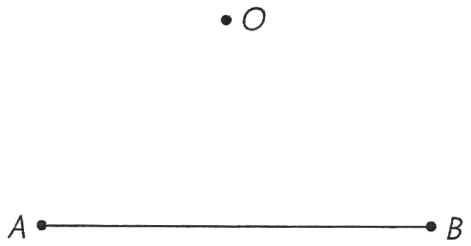
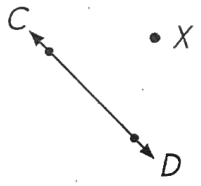
37. Draw and label a line segment BC such that the measure of angle ABC is 167°. Line segment AB is given. *(Lesson 9.2)*



38. Draw a line segment perpendicular to AB through point O. *(Lesson 10.1)*



39. Draw a line parallel to $\overleftrightarrow{CD}$ passing through point X. *(Lesson 10.2)*



40. AB is a vertical line segment and BC is a horizontal line segment. Find the measure of $\angle ABC$. *(Lesson 10.3)*

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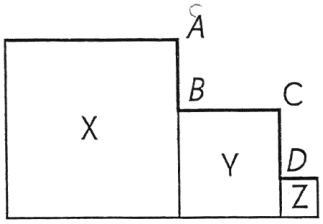
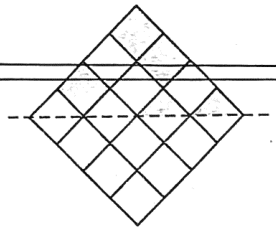
41. Look at the figure below to answer the question. *(Lesson 12.3)*



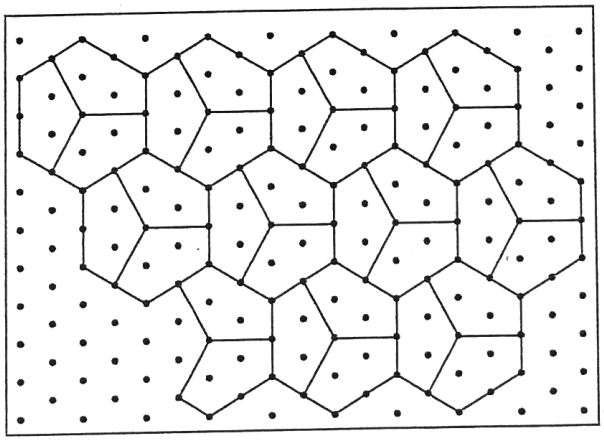
X, Y, and Z are squares. The length of each side of X is 5 centimeters and the length of each side of Y is 3 centimeters. $AB = CD$.
Find the total length of the thick lines in the figure.

_____

42. Shade some squares and half-squares to make a symmetric pattern in the figure. *(Lesson 13.3)*



43. In the tessellation below, the unit shape is .
Extend the tessellation in the space provided by adding four more unit shapes. *(Lesson 14.2)*



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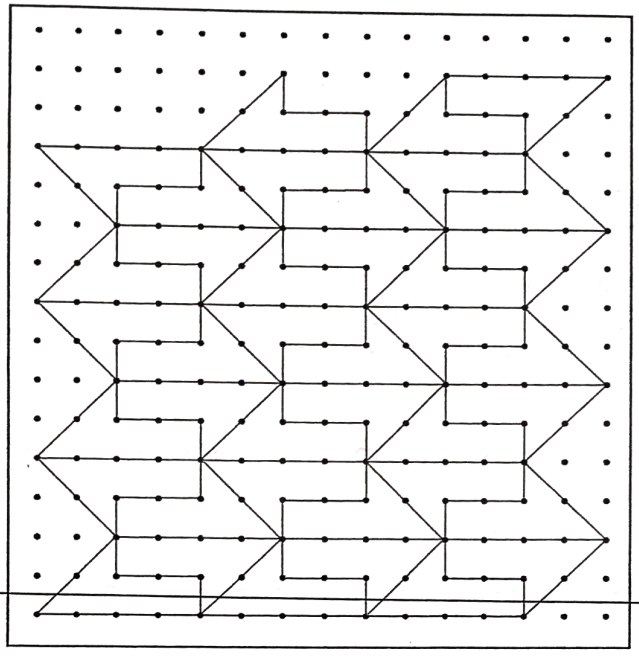
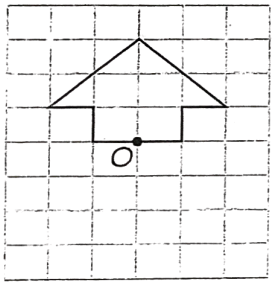
44. Complete the tessellation by adding three more unit shapes. *(Lesson 14.2)*



45. Complete the figure so that it has rotational symmetry about point *O*. *(Lesson 13.3)*



46. **a.** Does the word [N] [O] have rotational symmetry? *(Lesson 13.3)*

_____

b. Fill in the box with a letter so that [N] [O] [ ] will have rotational symmetry. *(Lesson 13.3)*

_____

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Extended Response

Solve. Show your work.

47. Jane used $\frac{1}{4}$ of the flour to make biscuits.

She used $\frac{1}{2}$ of the flour to bake a cake.

What fraction of the flour was left?

48. Mr. Lim has some savings. If he gives \$40 to one brother, he will have \$6,145 left. But he decides to give all his savings to his 5 brothers equally. How much will each brother get?

49. Rita bought fabric and ribbon from a store. The ribbon cost \$18.50. Rita paid the cashier \$50.00 and received change of \$5.25. How much did the fabric cost?

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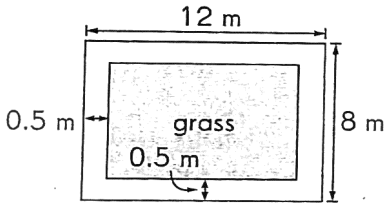
50. The area of a rectangle is 98 square centimeters, and its width is 7 centimeters. Find the length.

51. Richard planted some grass on a rectangular plot of land which measures 12 meters by 8 meters.
He left a margin of 0.5 meters around the grass, as shown in the figure below. Find the area of land covered by grass. *(Lesson 12.4)*



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End-of-Year Review

Test Prep

Multiple Choice

Fill in the circle next to the correct answer.

1. The digit 9 in 89.4 stands for _____. *(Lesson 7.2)*

(A) 9 hundredths (B) 9 tenths
(C) 9 ones (D) 9 tens

2. Find 9.50 – 2.63. *(Lesson 8.2)*

(A) 5.07 (B) 5.73
(C) 6.67 (D) 6.87

3. The product of 9 and _____ is 1,107. *(Lesson 3.1)*

(A) 123 (B) 1,098
(C) 1,116 (D) 9,963

4. The table shows the number of fruit and biscuits a group of students have. Some numbers in the table are missing. Use the information in the table to answer the question. *(Lesson 4.1)*

Name	Number of Fruit	Number of Biscuits	Total
Annabel	25	34	59
Mandy	12	26	38
Crystal		17	

The total number of fruit and biscuits is 120. How many fruit does Crystal have?

(A) 6 (B) 23
(C) 37 (D) 97

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