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 fruits 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 Fruits	Number of Biscuits	Total
Annabel	25	34	59
Mandy	12	26	38
Crystal		17	

    The total number of fruits and biscuits is 120. How many fruits does Crystal have?
    - (A) 6
    - (B) 23
    - (C) 37
    - (D) 97

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?

Ⓐ 40 Ⓑ 26

Ⓒ 23 Ⓓ 10

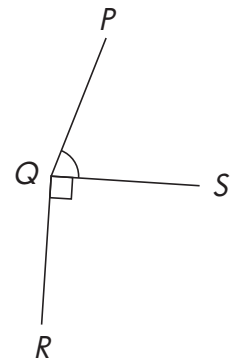**6.** Peter draws one of these number cards from a bag. *(Lesson 5.5)*

| 4 | 1 | 12 | 7 | 23 | 10 |

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

Ⓐ $\frac{1}{2}$ Ⓑ $\frac{1}{3}$

Ⓒ $\frac{1}{4}$ Ⓓ $\frac{1}{6}$

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

Ⓐ $\frac{1}{12}$ Ⓑ $\frac{2}{15}$

Ⓒ $\frac{2}{5}$ Ⓓ $\frac{11}{15}$

8. The measure of $\angle PQR$ is 162°. Find the measure of $\angle PQS$. *(Lesson 9.3)*
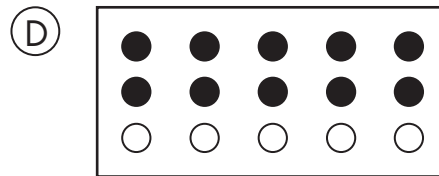
Ⓐ 18° Ⓑ 72°

Ⓒ 81° Ⓓ 9°

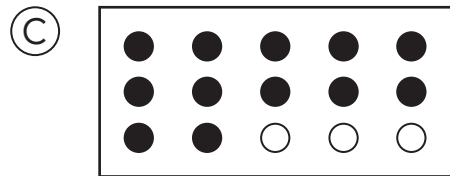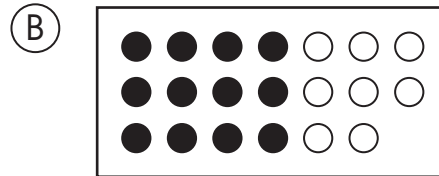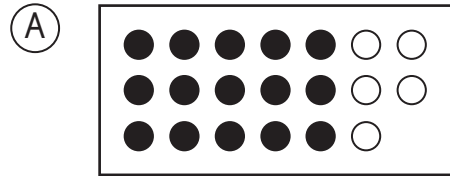**9.** $4\dfrac{3}{5} =$ _____ *(Lesson 6.3)*

(A) $\dfrac{12}{5}$ (B) $\dfrac{20}{5}$
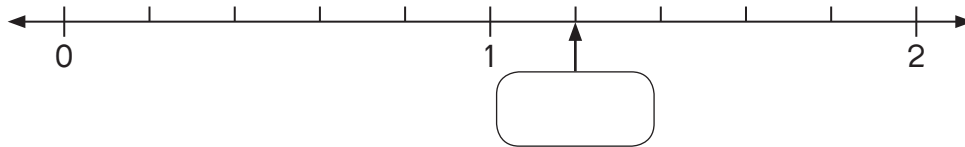
(C) $\dfrac{23}{5}$ (D) $\dfrac{43}{5}$

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

(A)   (B)

(C)   (D)

11.

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

(A) 0   (B) 1.2

(C) 1.3   (D) 4

12. 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

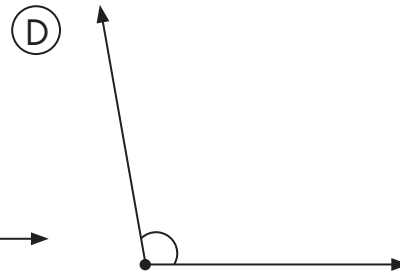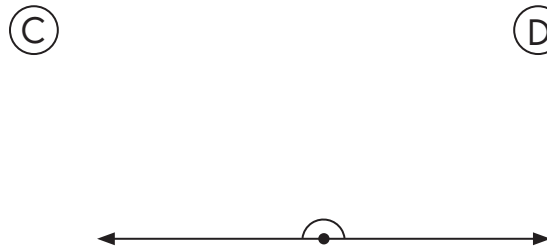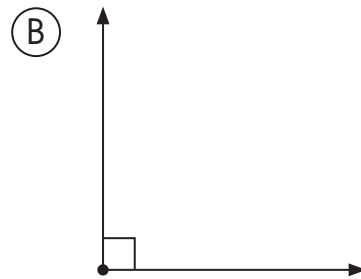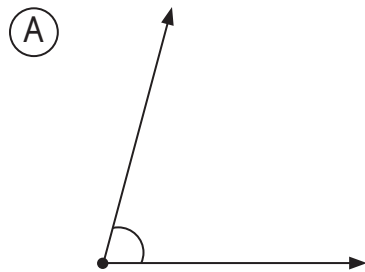(C) 44.99 kilograms   (D) 44.55 kilograms

13. 0.55 is not equal to _____. *(Lesson 7.5)*

(A) $\dfrac{11}{20}$ (B) $\dfrac{55}{100}$

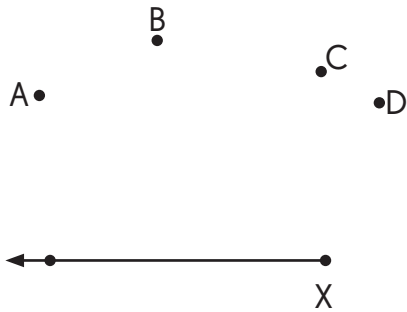(C) $\dfrac{550}{1,000}$ (D) $\dfrac{55}{10}$

14. 4.6 − 0.46 is equal to _____. *(Lesson 8.2)*

(A) 0   (B) 4.14

(C) 4.20   (D) 4.26

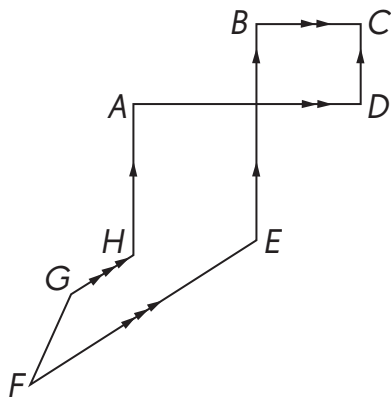**15.** Which of these angles is an acute angle? *(Lesson 9.1)*

(A)

(B)

(C)

(D)

16.

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

17.   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

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

Ⓐ AD Ⓑ GH

Ⓒ BE Ⓓ FG

19. In the square below, find the measure of ∠*a*. *(Lesson 11.2)*
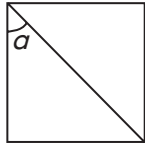
(A) 30° (B) 45°

(C) 60° (D) 90°

20. The perimeter of a rectangle is 24 centimeters.
The length of one of its sides is 5 centimeters.
What is the area? *(Lesson 13.1)*

(A) 7 cm² (B) 14 cm²

(C) 35 cm² (D) 49 cm²

21. All line segments on the figure meet at right angles.
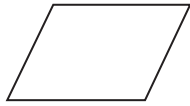Find *EF*. *(Lesson 13.1)*
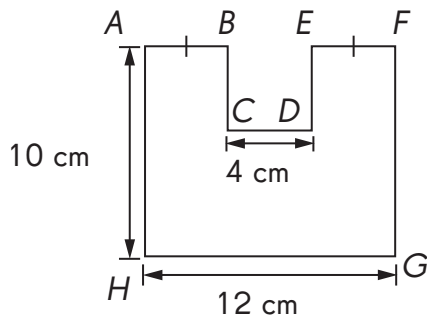
(A) 4 cm (B) 6 cm

(C) 8 cm (D) 10 cm
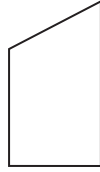
22. Which pair of figures are symmetric? *(Lesson 14.1)*
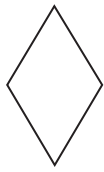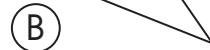
A   B   C   D

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

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

23. What is the repeated shape used in the tessellation? *(Lesson 15.1)*

(A)   (B)

(C)   (D)
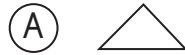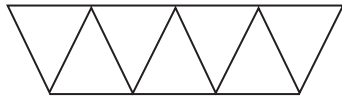
24. Which of these shapes has rotational symmetry? *(Lesson 14.2)*

(A)   (B)

(C)   (D)
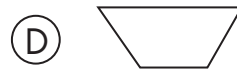
25. This shape can be tessellated by _____. *(Lesson 15.2)*
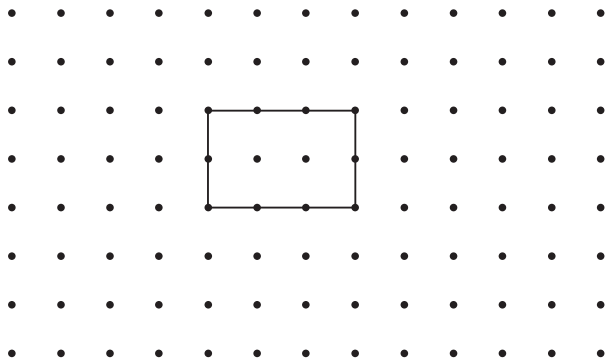
Ⓐ sliding   Ⓑ rotation

Ⓒ flipping   Ⓓ All of the above

26.

From position A to B, the unit shape has been _____. *(Lesson 15.2)*

Ⓐ slid   Ⓑ rotated

Ⓒ flipped   Ⓓ none of the above

Short Answer

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

27.   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)*

_____

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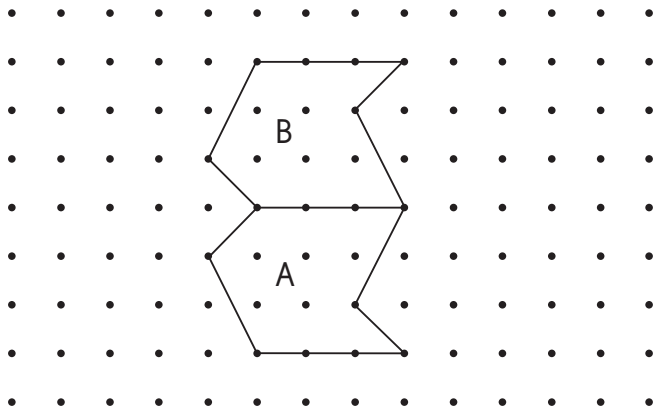Complete the table and answer the questions. *(Lesson 4.1)*

	Red Marbles	Blue Marbles	Total
Anthony	18	26	
Michelle	37		61

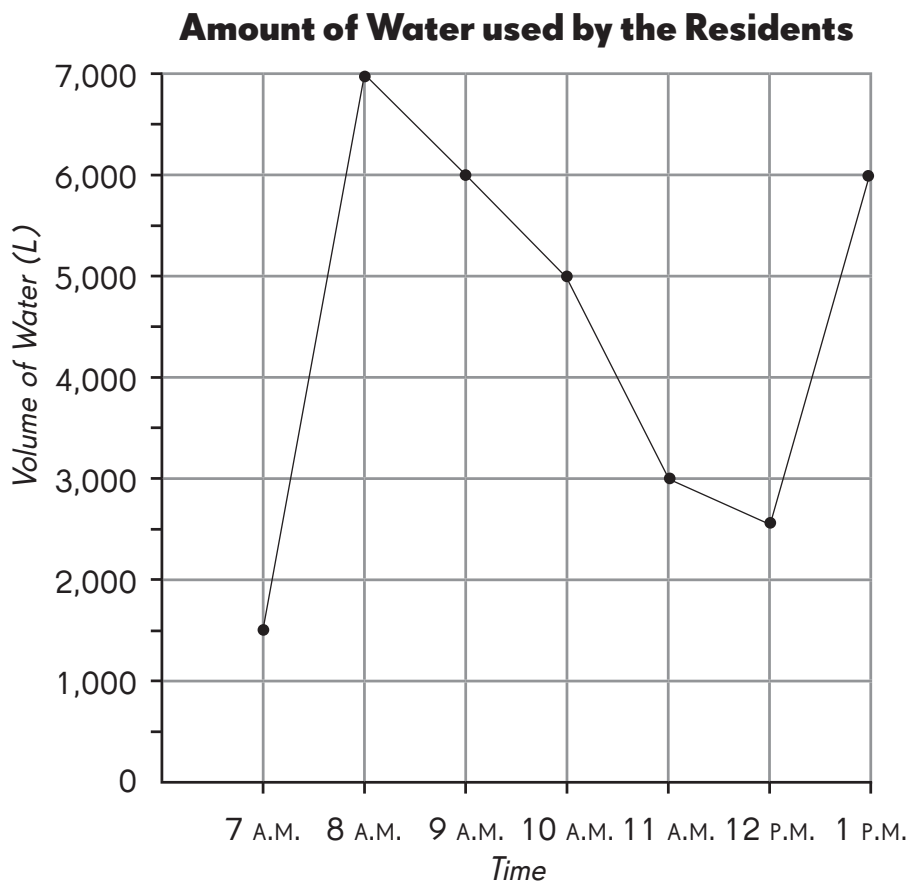**a.**   What was the total number of red marbles?

_____

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

_____

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

Amount of Water used by the Residents

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?

30. 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)*

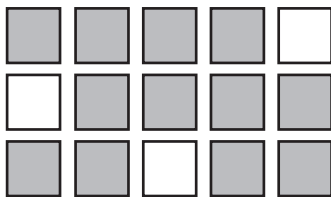**31.** What is $\frac{7}{12} - \frac{2}{6}$? Express your answer in simplest form. *(Lesson 6.2)*

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

_____

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

_____

34.   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)*

_____

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

$6.34 = 6 + 0.3 + \boxed{}$

_____

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

_____

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

_____

38.   The length of a wooden rod is 3 feet. 4 pieces of wood of length 8 inches each are cut from it. What is the length of the remaning piece of wood?
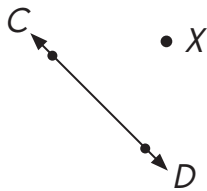*(Lesson 12.1)*

_____

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

A •————————• B

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

• O

A •————————————————• B

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

C • X

D

42. *AB* is a vertical line segment and *BC* is a horizontal line segment. Find the measure of ∠*ABC*. *(Lesson 10.3)*

**43.** Look at the figure below to answer the question. *(Lesson 13.3)*
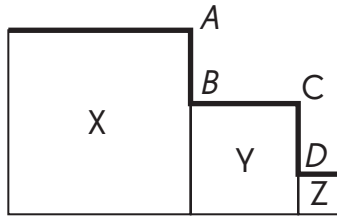
X, Y, and Z are squares. The length of each side of X is 5 centimeters and the length of each side of Y is 3 centimeters. $AB = CD$.
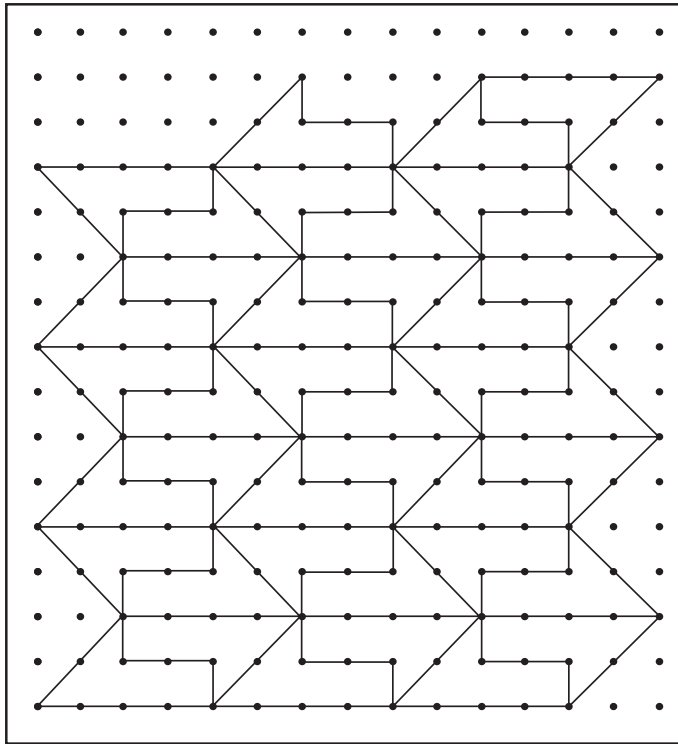Find the total length of the thick lines in the figure.

_____

44. Shade some squares and half-squares to make a symmetric pattern in the figure. *(Lesson 14.3)*
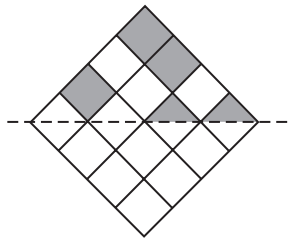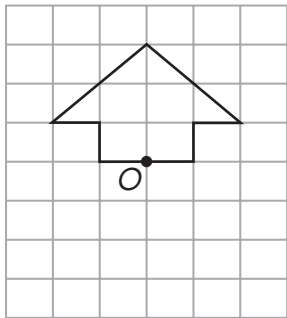

45. In the tessellation below, the unit shape is ⬠.
Extend the tessellation in the space provided
by adding four more unit shapes. *(Lesson 14.2)*
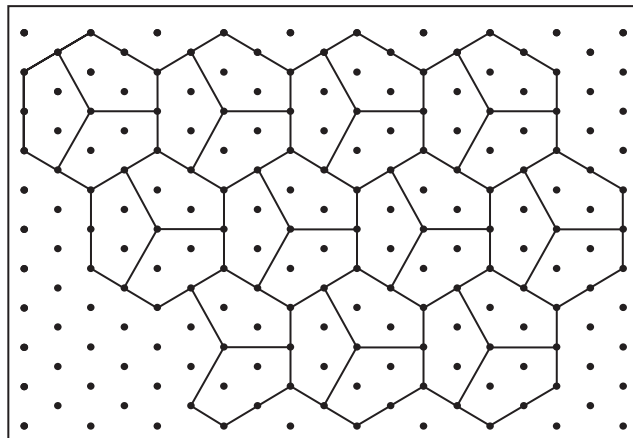
46. Complete the tessellation by adding three more unit shapes. *(Lesson 15.2)*

47. Complete the figure so that it has rotational symmetry about point *O*. *(Lesson 14.3)*

48. **a.** Does the word ┌─┐┌─┐ N │ O have rotational symmetry? *(Lesson 14.3)*

_____

b. Fill in the box with a letter so that N O ☐ will have rotational symmetry. *(Lesson 14.3)*

_____

Extended Response
Solve. Show your work.

49. Jane used $\frac{1}{4}$ of the flour to make biscuits.
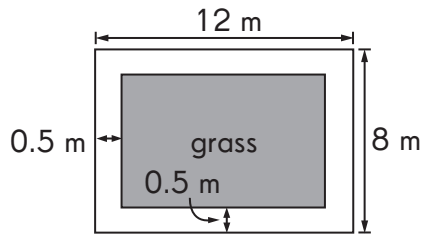
She used $\frac{1}{2}$ of the flour to bake a cake.

What fraction of the flour was left?

50. 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?

51. 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?

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

53. 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 13.4)*

12 m

0.5 m   grass   8 m

0.5 m