

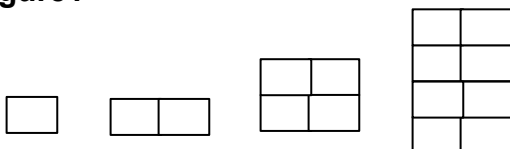
Fifth Grade Math Summative Assessment

Name: \_\_\_\_\_

CCSS	PASS Standard	Question Numbers	Mastered?
OA.3.i	1.1 Algebra Patterns	1 2 3 4	
OA.2	1.2 Equations	5 6 7	
NBT.2.1 OA.1	1.3 Number Patterns	8 9 10	
NBT.1-3 MD.2 NF.3-4,7a	2.1 Number Sense	11 12 13 14 15 16 17 18	
NBT.5-7	2.2 Number Operations	19 20 21 22 23 24 25 26 27 28 29 30 31	
NF.1-2 G.3-4	3.1 Polygons	32 33 34	
	3.2 Angles	35 36	
G.1-2	N/A Coordinate Systems	37 38	
MD.1-4	4.1 Measurement	39 40 41 42 43 44	
	4.2 Money	45	
	5.1 Data Analysis	46 47 48	
	5.2 Probability	49	
	5.3 Central Tendency	50	
	Total Test: _____ of 50		Score:

**PASS Standard 1.1**

1) If Lamar follows the pattern below, how many tiles will he need for his seventh figure?



- A 12 tiles
- B 16 tiles
- C 32 tiles
- D 64 tiles

2) Look at the diagram below.

0.55	0.56	0.57	A	B
				0.69
				0.79
				C

What values fill the blank boxes?

- A  $A = 0.58, B = 0.59, C = 0.80$
- B  $A = 0.58, B = 0.68, C = 0.89$
- C  $A = 0.58, B = 0.59, C = 0.89$
- D  $A = 0.68, B = 0.69, C = 0.80$

3)

who  
in  
  
this

DAY	MORNING (m)	AFTERNOON (a)
Monday	24	37
Tuesday	30	43
Wednesday	35	48
Thursday	29	42
Friday	48	61

Kurt recorded the number of students attended the Tulsa Zoo the morning and afternoon hours. The results are shown in table.

Which equation best describes the number of students who attended in the morning (m) compared to the number of students who attended in the afternoon (a)?

- A  $m + 12 = a$
- B  $a + 12 = m$
- C  $m + 13 = a$
- D  $a + 13 = m$

4) If  $n$  is the input number, which expression could be used to find the value of the output shown in this table?

<b>Input (n)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Output</b>	<b>3</b>	<b>5</b>	<b>7</b>	<b>9</b>	<b>11</b>

- A  $2n + 1$
- B  $3n$
- C  $4n - 1$
- D  $n + 2$

**PASS Standard 1.2**

5) Randi solved this equation in one step to find the solution for x.

$37 + x = 66$

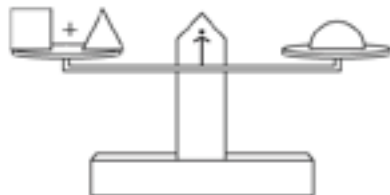
- A Subtract 37 from the left side of the equation and subtract 37 from the right side of the equation
- B Add 37 to the left side of the equation and subtract 37 from the right side of the equation
- C Subtract 37 from the left side of the equation and add 37 to the right side of the equation
- D Add 37 to the left side of the equation and add 37 to the right side of the equation

What is the value of X? \_\_\_\_\_

6) For every 9 calendars that Koji sells, he receives a movie gift certificate. Which equation can be used to find how many gift certificates Koji will receive if he sells 65 calendars?

- A  $65 \times n = 9$
- C  $65 \times 9 = n$
- B  $9 \div n = 65$
- D  $65 \div 9 = n$

7) The scale shown is balanced.



Which sentence must be true?

- A  $\triangle = \text{semicircle} + \square$
- B  $\triangle = \text{semicircle} - \square$
- C  $\triangle = \text{semicircle} \times \square$
- D  $\triangle = \text{semicircle} \div \square$

**PASS**

**Standard 1.3**

8) Which expression shows how you can evaluate  $7 \times 63$  using the distributive

property?

- A  $(7 \times 6) + (7 \times 3)$
- B  $(7 \times 63) \times (7 \times 3)$
- C  $(7 \times 60) + (7 \times 30)$
- D  $(7 \times 60) + (7 \times 3)$

9) Which of these is equivalent to the expression shown below?

$$4(x + 3)$$

- A  $4x + 3$
- B  $4x + 4$
- C  $4x + 7$
- D  $4x + 12$

10) Which equation demonstrates the commutative property of multiplication?

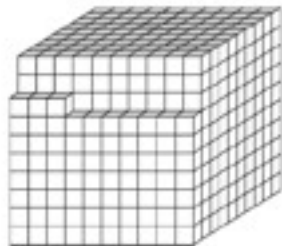
- A  $x(1/x) = 1$
- B  $(6f)3 = 3(6f)$
- C  $3(4m \times 5) = 12m \times 15$
- D  $12(2n) = (12n)2$

**PASS Standard 2.1**

11) A National Park in Montana has forty-three thousand, two-hundred twenty-nine and fifty-eight hundredths acres of forest. Which shows the amount of acres of forest in standard form?

- A 43,229.58
- B 43,229.058
- C 43,229,058
- D 43,229.508

12) Which decimal number represents this thousandths cube?



- A 0.0973
- B 0.973
- C 9.73
- D 97.3

13)  
from

Which shows the following values  
greatest to least?

**$\frac{1}{4}$ ; 0.75;  $\frac{1}{3}$  ; 0.5**

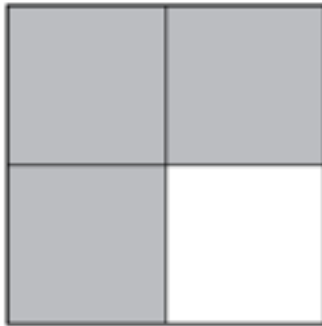
**A** 0.75;  $\frac{1}{4}$ ; 0.5;  $\frac{1}{3}$

**B**  $\frac{1}{4}$ ;  $\frac{1}{3}$ ; 0.5; 0.75

**C**  $\frac{1}{4}$ ; 0.5;  $\frac{1}{3}$ ; 0.75

**D** 0.75; 0.5;  $\frac{1}{3}$ ;  $\frac{1}{4}$

**14.** Which decimal number best represents the shaded part of this picture?



**A** 0.3

**B** 0.34

**C** 0.6

**D** 0.75

**15)** The average daily temperatures in July of some cities in Texas are shown in the table. Which of the following lists the cities from greatest temperature to least temperature?

City	Average Daily Temperature
Austin	84.52°F
Dallas	85.9°F
San Antonio	85°F
Fort Worth	85.31°F

**A** Dallas, Fort Worth, San Antonio, Austin

**B** Austin, Dallas, San Antonio, Fort Worth

**C** Austin, San Antonio, Fort Worth, Dallas

**D** Dallas, San Antonio, Fort Worth, Austin

**16.** The table shows the midday temperatures for each of five days during one week

last

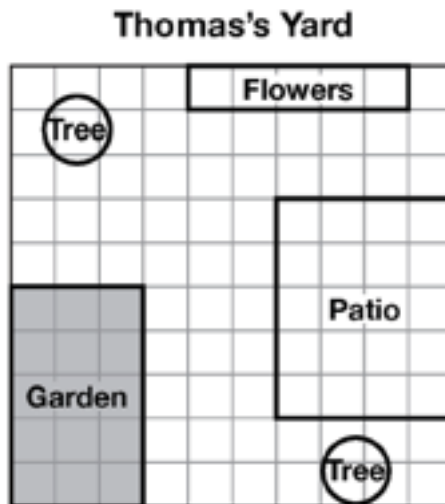
Midday Temperatures	
Day	Temperature (degrees F)
Monday	7
Tuesday	-2
Wednesday	-1
Thursday	4
Friday	0

winter.

Which lists the weekdays in order from the day with the lowest midday temperature to the day with the highest midday temperature?

- A Friday, Wednesday, Tuesday, Thursday, Monday
- B Tuesday, Wednesday, Friday, Thursday, Monday
- C Friday, Tuesday, Wednesday, Thursday, Monday
- D Tuesday, Friday, Wednesday, Thursday, Monday

17) Thomas made a drawing of his yard on a grid. The shaded squares represent the area for the garden.

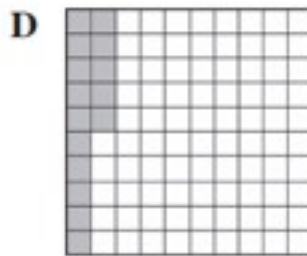
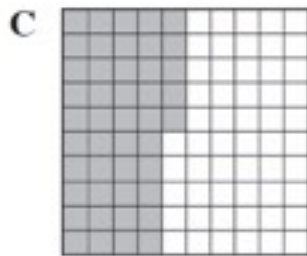
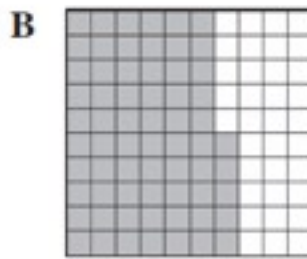
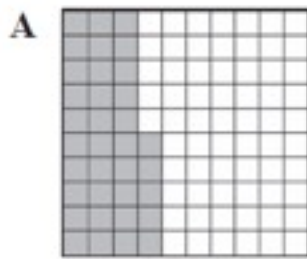


Which decimal number is equivalent to the fractional part of Thomas' yard that will become the garden?

- A 0.015
- B 0.15
- C 1.50
- D 15.00

18)

Which  $10 \times 10$  grid is shaded to represent the decimal number that, when added to 0.65, results in a total of 1.00?



**PASS Standard 2.2**

19) Maggie had a bag of peanuts that weighed 2.84 pounds. She took some of the peanuts out of the bag. The bag then weighed 1.24 pounds. What was the weight of the peanuts that Maggie took out of the bag?

- A 4.08 pounds
- B 3.60 pounds
- C 1.60 pounds
- D 1.06 pounds

20) In a relay race, Mia ran 1.43 kilometers. Then she passed the baton to Gerald, who ran an additional 2.7 kilometers. How many kilometers did they run in all?

- A 4.13 kilometers
- B 3.36 kilometers
- C 3.50 kilometers
- D 1.70 kilometers

21) Jenny and Miranda are working on a puzzle. Jenny has completed  $\frac{5}{8}$  of the

puzzle and Miranda has completed  $\frac{1}{3}$  of it. What fraction represents how much more of the puzzle Jenny has completed than Miranda?

- A  $\frac{1}{6}$
- B  $\frac{7}{24}$
- C  $\frac{4}{5}$
- D  $\frac{25}{24}$

22) Hanna jogged  $1\frac{3}{4}$  miles (mi) on Saturday and 3 miles on Sunday. What is the difference between these two distances?

- A  $1\frac{1}{4}$  mi
- B  $2\frac{1}{4}$  mi
- C  $2\frac{3}{4}$  mi
- D  $4\frac{3}{4}$  mi

23) Solve the expression.

$$1\frac{1}{2} + 2\frac{1}{4} - 1\frac{1}{5} = \underline{\quad?}$$

- A  $3\frac{9}{20}$
- B  $3\frac{11}{20}$
- C  $3\frac{1}{5}$
- D  $3\frac{1}{2}$

24) The table shows the amount of popcorn four students shared at the movies.

Popcorn Shared

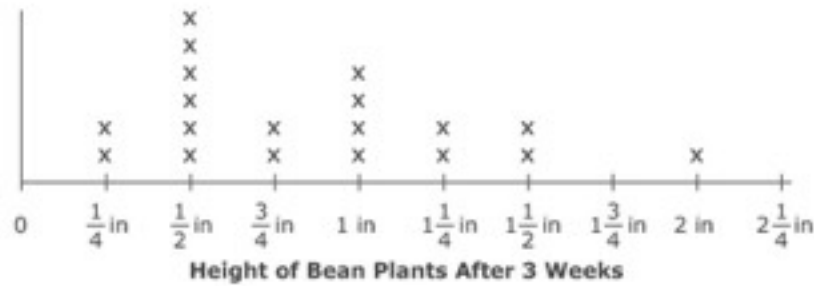
Student	Amount of Popcorn (ounces)
Denise	$1\frac{3}{4}$
Juan	$\frac{5}{10}$
Nikita	$1\frac{1}{2}$
Walter	$1\frac{8}{10}$

What was the total amount of popcorn shared?

- A  $5\frac{11}{20}$  ounces
- B  $5\frac{1}{20}$  ounces
- C  $3\frac{17}{20}$  ounces
- D  $3\frac{17}{26}$  ounces



25) This line plot shows the heights of bean plants in a garden after 3 weeks.



What is the total height, in inches, of all the bean plants that are taller than 1 inch?

\_\_\_\_\_

26) Solve the multiplication problem in two different ways.

$$\begin{array}{r} 4 \square \\ \times 56 \\ \hline 2 \square \square 2 \end{array}$$

$$\begin{array}{r} 4 \square \\ \times 56 \\ \hline 2 \square \square 2 \end{array}$$

27) McKinley Elementary school is going on a field trip. All 14 classes with 421 students are going. Each bus can hold 28 students. How many buses will the school need to take for the field trip to ensure that ALL students can go?

- A 14
- B 15
- C 16
- D 17

28) Decide if the value of the expression is less than, equal to, or greater than 15.

Less than 15	Equal to 15	Greater than 15
$2 \times \frac{1}{2} \times (5 \times 3)$	$(5 \times 3) \div 5$	$\frac{1}{4} \times (5 \times 3)$
$(5 \times 3) + 6$	$20 - (5 \times 3)$	$(5 \times 3) \times (8 - 7)$
$1 \times (5 \times 3)$	$2 \times (5 \times 3)$	

29) Place each measurement into each column of the table with an equivalent measure. Some of the measurement may not have an equivalent measure.

0.001 km    0.01 mm    0.1 cm    0.01 km    0.01 m

1 Meter	1 Centimeter	1 Millimeter

30) Find two fractions that can be added using the denominator of 24.

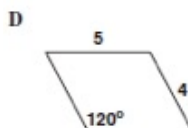
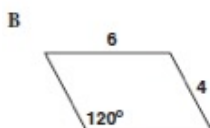
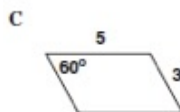
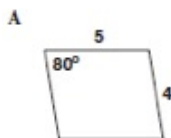
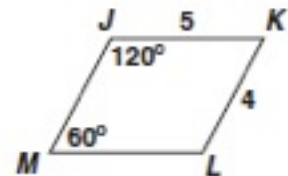
$\frac{1}{6}$      $\frac{1}{5}$      $\frac{3}{16}$      $\frac{5}{7}$      $\frac{9}{10}$      $\frac{1}{9}$      $\frac{7}{8}$

31) A baker used 12 cups of batter to make muffins. It took  $\frac{2}{3}$  cup of batter to make 1 muffin. How many muffins did the baker make?

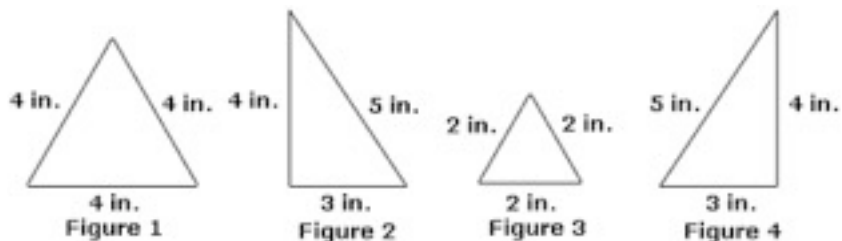
- A. 6 muffins
- B. 8 muffins
- C. 18 muffins
- D. 36 muffins

**PASS Standard 3.1**

32) Which parallelogram is congruent to parallelogram JKLM?



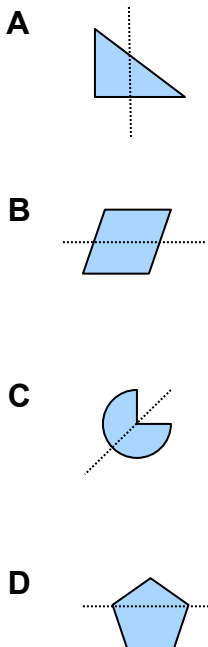
33) Identify the figures that are similar but not congruent.



Figures are not drawn to scale

- A) Figure 1 and Figure 3
- B) Figure 1 and Figure 4
- C) Figure 2 and Figure 3
- D) Figure 3 and Figure 4

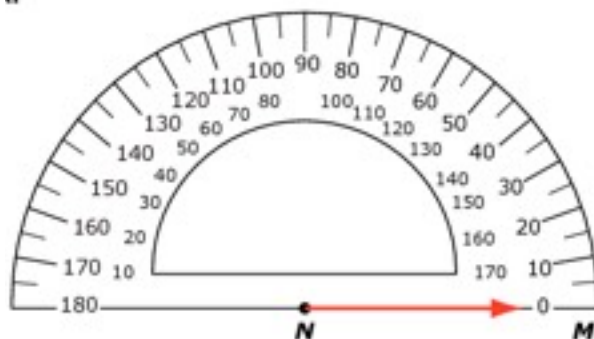
34) Which shows a line of symmetry?



**PASS Standard 3.2**

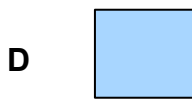
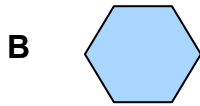
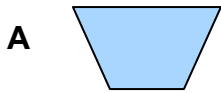
35) Ray  $NM$  is shown.

- A. Angle  $MNP$  measures  $45^\circ$ . Draw a ray  $NP$  and label point  $P$ .
- B. Angle  $PNR$  measures  $60^\circ$ . Draw a ray  $NR$  and label point  $R$ .
- C. What is the measure of the angle  $MNR$ .



Measure of angle  $MNR = \square^\circ$

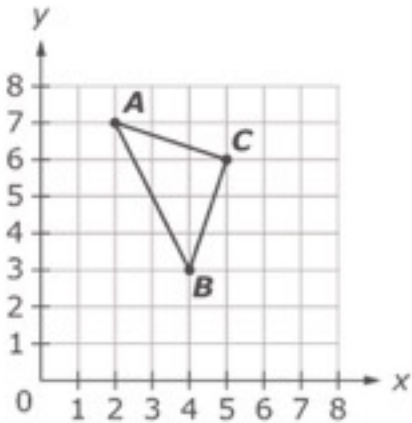
36) Which shape has more obtuse angles than acute angles?



**Coordinate Systems**

37)

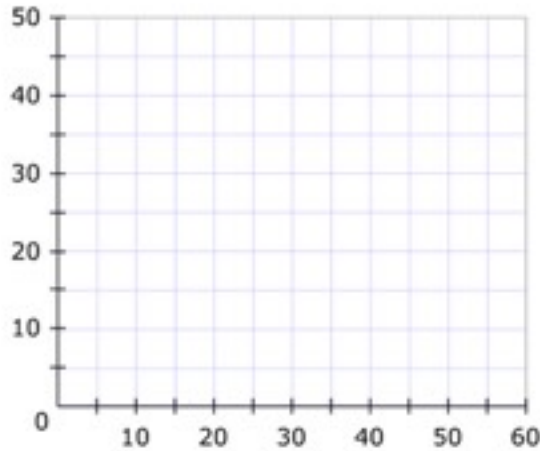
Look at triangle *ABC*.



What are the coordinates of points *A*, *B*, and *C*?

- Ⓐ  $A(2, 7), B(4, 3), C(5, 6)$
- Ⓑ  $A(2, 7), B(5, 6), C(4, 3)$
- Ⓒ  $A(7, 2), B(3, 4), C(6, 5)$
- Ⓓ  $A(7, 2), B(4, 3), C(5, 6)$

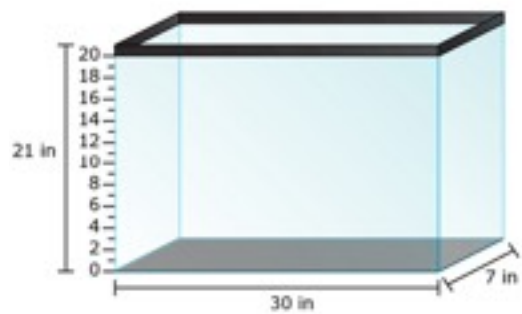
38) Draw a rectangle with an area of 1575 square units and a side of 45 units.



**PASS Standard 4.1**

39) Demario puts 1050 cubic inches of dirt into the tank shown. To what marker will Demario fill the tank?

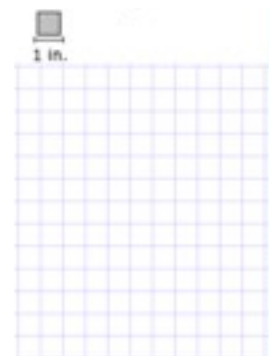
- A. 2 inches
- B. 5 inches
- C. 10 inches
- D. 15 inches






40) James folds a square piece of paper in half to create a rectangle with a perimeter of 12 inches.

A. Draw a picture of the original square paper.

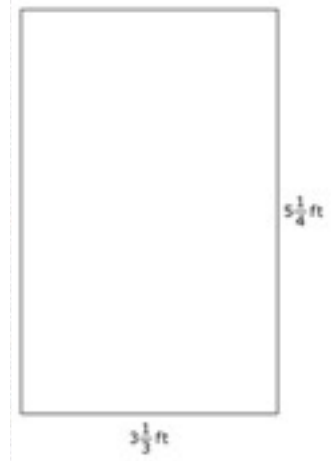
B. Determine the area of the rectangle James created.



41) William used 6 squares to make the figure shown. For A-C, add one additional square to increase the perimeter, keep the perimeter the same, or decrease the perimeter.

<p><b>A. Perimeter increases</b></p> 
<p><b>B. Perimeter stays the same</b></p> 
<p><b>C. Perimeter decreases</b></p> 

42) Rob is calculating the area of this rectangle. His strategy is to multiply the whole numbers first and then multiply the fractions. Since  $3 \times 5 = 15$  and  $\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$ , he concludes that the area of the rectangle is  $15 \frac{1}{2}$  square feet. Find the correct area, in square feet, of the rectangle.



43) Gina is 3 feet and 2 inches tall. Her father is 6 feet tall. Gina's father is how many inches taller than Gina?

- A 34 inches
- B 32 inches
- C 28 inches
- D 2.8 inches

44) Jan plans to make some dip for her party:

- The recipe calls for 1 cup of sour cream.
- She plans to triple the recipe.
- Sour cream is sold in 1-pint containers.

What is the least number of 1-pint containers of sour cream Jan must have to make the dip?

- A 1 container

- B 2 containers
- C 3 containers
- D 4 containers

**PASS Standard 4.2**

45) Kamilah took \$7.75 to her school book fair. She bought 3 posters and 1 book. The prices, including tax, for items sold at the book fair are shown.

**Book Fair**

Item	Price
stickers	\$0.25
pencil	\$0.35
poster	\$1.05
gel pen	\$1.60
book	\$3.00

What is the greatest number of pencils Kamilah can buy with the money she has left?

- A 5 pencils
- B 4 pencils
- C 2 pencils
- D 1 pencil

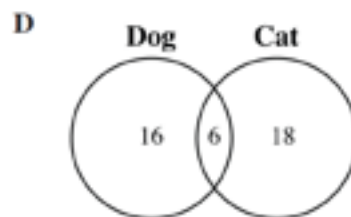
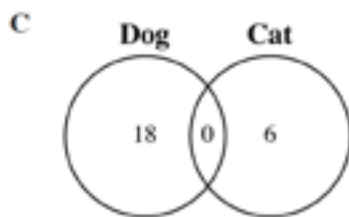
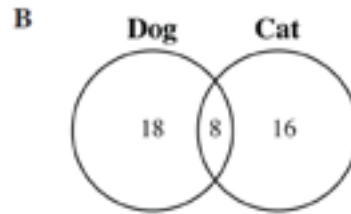
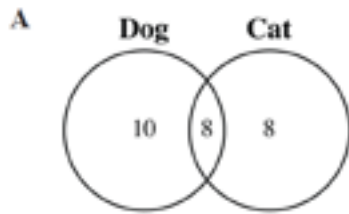
**PASS Standard 5.1**

46)

James surveyed 26 of his classmates who own at least one dog or cat. The table shows his results.

Pets	Number of Classmates
Dog	18
Cat	16

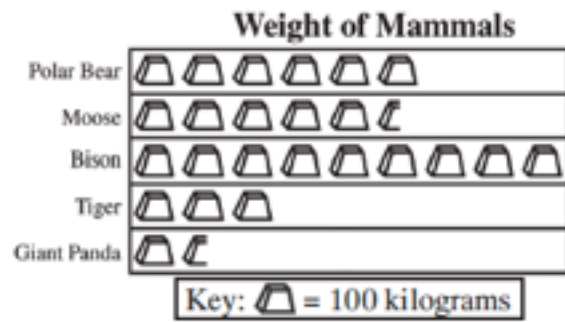
Which Venn diagram matches this information?



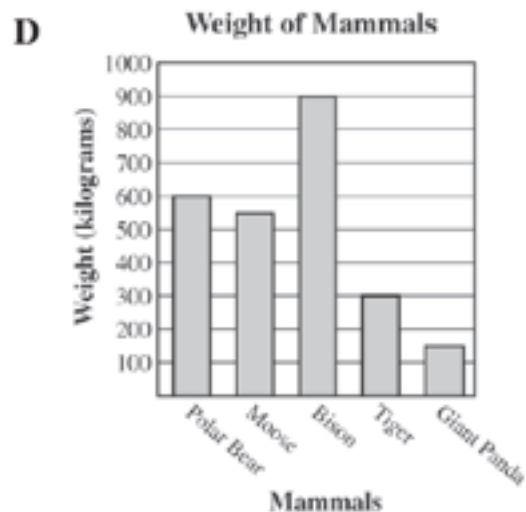
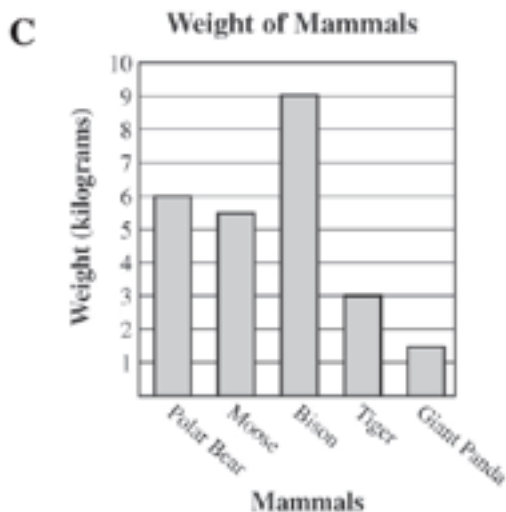
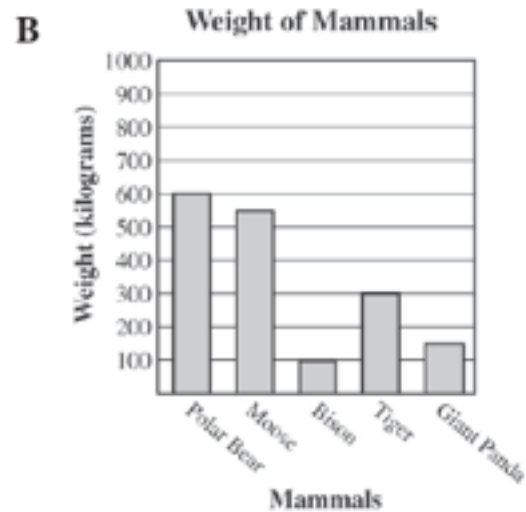
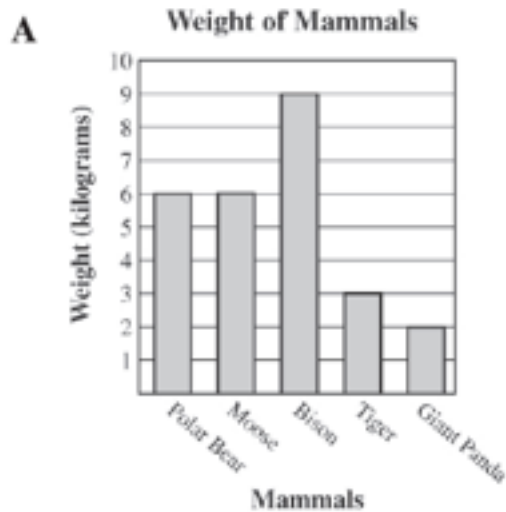
47)



Katie wants to use a bar graph instead of this pictograph for her report on mammals.



Which bar graph shows the same information as the pictograph?



48) The table shows the favorite foods of the 5<sup>th</sup> graders in Tulsa Public Schools.

Favorite Food	Percent of 5 <sup>th</sup> Graders
Pizza	45%
Hot Dog	30%
Hamburger	20%
Meatloaf	5%

Which type of graph is most appropriate to display the data in this table?

- A bar graph
- B line graph
- C circle graph
- D pictograph

**PASS Standard 5.2**

49) A box contains only blue and orange rubber balls. All balls are the same size. The probability of drawing a blue ball on the first draw is 10 out of 27. What is the least number of orange balls in the box?

- A 10
- B 17
- C 27
- D 37

**PASS Standard 5.3**

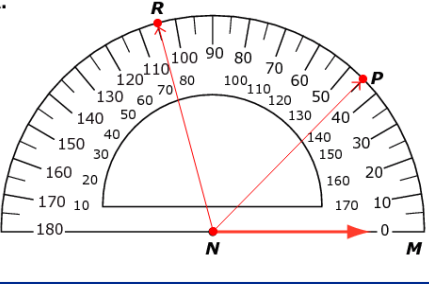
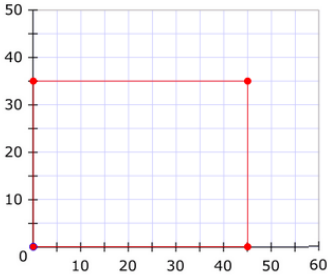
50) Edward recorded 6 of the 7 numbers he needed in a data set. He knows the median for this set of data is 15.


23, 12, 11, 20, 16, 15,   ?

Which number could be the missing number in this set of data?

- A 12
- B 16
- C 19
- D 26

Fifth Grade Math Summative Assessment: KEY

QUESTION	ANSWER	QUESTION	ANSWER
1	B	26	$\begin{array}{r} 4\boxed{2} \\ \times 56 \\ \hline 2\boxed{3}\boxed{5}\boxed{2} \end{array}$ <hr/> $\begin{array}{r} 4\boxed{7} \\ \times 56 \\ \hline 2\boxed{6}\boxed{3}\boxed{2} \end{array}$
2	C	27	C
3	C	28	
4	A	29	1 meter = 0.001 km; 1 centimeter = 0.01 m; 1 millimeter = 0.1 cm
5	a. A b. 29	30	1/6 and 7/8
6	D	31	C
7	B	32	D
8	D	33	A
9	D	34	C
10	B	35	 <p>Measure of angle <b>MNR</b> = <math>\boxed{105}^\circ</math></p>
11	A	36	B
12	B	37	A
13	B	38	
14	D	39	B

15	A	40	a. Square must be 4x4 b. 8 square inches
16	B	41	<div style="border: 1px solid blue; padding: 5px;"> <p>A. Perimeter increases</p>  </div> <hr style="border: 1px solid blue;"/> <p>B. Perimeter stays the same</p> 