Benchmark Test 4 (Chapters 1–12)

Read each question. Fill in the correct answer.

1. What are all of the ways in which the figure can be classified?



- (A) quadrilateral, parallelogram
- (B) quadrilateral, parallelogram, square, rectangle
- © quadrilateral, parallelogram, square, rhombus, rectangle
- quadrilateral, parallelogram, rectangle
- **2.** Lani represented the length of a beetle (centimeters) in expanded notation.

$$3 \times 1 + \left(4 \times \frac{1}{100}\right) + \left(5 \times \frac{1}{1,000}\right)$$

What is this number in standard form?

- **(F)** 0.345
- **©** 3.0405
- 3.045
- (i) 3.45
- **3.** A company assembles marble bags with 18 marbles to a bag. About how many bags does the company need for 730 marbles?
 - A 80 bags
 - B 50 bags
 - 40 bags
 - 30 bags

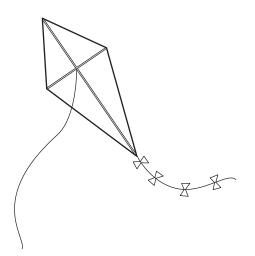
- **4.** Erin hiked 5.6 miles in the morning and 4.25 miles in the afternoon. How many miles did she hike in all?
 - **(F)** 1.35 miles
 - **©** 1.45 miles
 - (H) 9.31 miles
 - 9.85 miles

- **5.** The most visitors to Yosemite National Park in one year is 4,190,557. What is the value of the digit 9 in this number?
 - (A) 900,000
 - 90,000
 - © 900
 - **D** 90

- **6.** A deli made \$1,080 on 24 deluxe platters. How much money would the deli make on 35 deluxe platters?
 - **\$1,575**
 - © \$1,555
 - (H) \$1,475
 - \$1,455

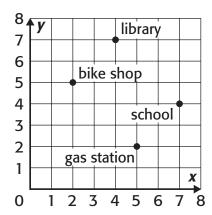
- 7. Omar pours $\frac{2}{3}$ cup of juice each morning for himself and his two brothers. How many quarts of juice does he use in 30 days?
 - (A) $7\frac{1}{2}$ quarts
 - 15 quarts
 - © 20 quarts
 - © 30 quarts

- **9.** A recipe for apricot stuffing calls for $1 \frac{1}{2}$ pounds of apricots. If Gracie increases the recipe $2 \frac{1}{2}$ times, how many pounds of apricots will she need?
 - (A) $7\frac{1}{2}$ pounds
 - **B** 4 pounds
 - \bullet 3 $\frac{3}{4}$ pounds
 - © 2 pounds
- **8.** A kite maker uses 125 feet of string for each kite he makes. How many feet of string does he need for 75 kites?



- **(F)** 8,055 ft
- © 8,275 ft
- (H) 9,075 ft
- 9,375 ft

10. Which place is located at (4, 7)?



- **(F)** bike shop
- © gas station
- library
- ① school

11. Chloe recorded the lengths of several walking stick insects.

Walking Stick	Length (cm)
А	10.24
В	11.1
С	10.2
D	11.05

Which list shows the lengths in order from *least* to *greatest*?

- (A) 10.24, 10.2, 11.1, 11.05
- **1**0.2, 10.24, 11.05, 11.1
- © 10.24, 10.2, 11.05, 11.1
- (D) 11.1, 11.05, 10.24, 10.2

(A) 1.5 grams
(B) 15 grams
(C) 150 grams
(D) 1,500 grams

13. The typical mass of a bullfrog is

3 bullfrogs in grams?

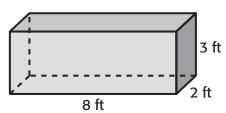
0.5 kilogram. What is the mass of

- **14.** Two packages weigh 3.92 pounds and 2.8 pounds. How many times heavier is the first package than the second?
 - F 0.7 times
 - © 1.12 times
 - 1.4 times
 - ① 1.84 times
- 12. Mrs. Hinshaw used $2\frac{3}{4}$ pounds of asparagus and $4\frac{1}{8}$ pounds of shrimp to make stir fry. How many more pounds of shrimp did she use than asparagus?
 - \bullet 1 $\frac{3}{8}$ pounds
 - © $1\frac{1}{2}$ pounds
 - \oplus 1 $\frac{2}{4}$ pounds
 - ① $2\frac{3}{8}$ pounds

- **15.** Davis wants to pour 5 gallons of punch into $\frac{1}{2}$ gallon jugs. How many jugs will he need?
 - (A) $2\frac{1}{2}$
 - **B** $5\frac{1}{2}$
 - **1**0
 - D 15

- **16.** Angelo used contact paper to cover shelves in a pantry and cupboard. He used $\frac{2}{3}$ of a roll for the cupboard and $\frac{5}{6}$ of a roll for the pantry. How much more contact paper did he use for the pantry?
 - $\bullet \frac{1}{6}$ roll
 - $\bigcirc \frac{1}{3}$ roll
 - $\oplus \frac{1}{2}$ roll
 - ① $\frac{2}{3}$ roll

17. Audrey bought a cedar chest to store her sweaters. What is the volume of the cedar chest?



- (A) 18 ft³
- **B** 26 ft³
- © 38 ft³
- 48 ft³

18. A pet store sold 8 hamsters for \$10 each and 8 mice for \$3 each. Which numerical expression represents this situation?

$$(F)$$
 8 + 10 × 8 + 3

©
$$(8 \times 10) \times (8 \times 3)$$

$$\oplus$$
 8 × 8 (10 + 3)

$$\bullet$$
 (8 × 10) + (8 × 3)

- **19.** An airline had 9,453,607 passengers in September. It had fewer passengers in November. Which could be the number of passengers in November?
 - (A) 9,481,886
 - **B** 9,454,647
 - 9,446,879
 - **(b)** 9,504,903

- **20.** Grady bought some fish for \$17.43 and some fish food for \$3.86. About how much more did Grady spend on the fish than on the fish food?
 - **(F)** \$12
 - \$13
 - (H) \$15
 - \$21

- **21.** Michaela wrote her name in block letters. She colored $\frac{3}{4}$ of the letters pink. She drew green dots on $\frac{1}{2}$ of the pink letters. What fraction of the letters is pink with green dots?
 - (A) $\frac{1}{4}$
 - \bullet $\frac{3}{8}$
 - © $\frac{6}{8}$
 - ① $\frac{5}{4}$

- 22. Ricardo spends $2\frac{2}{3}$ hours practicing soccer on Mondays and Wednesdays. He spends $1\frac{3}{4}$ hours practicing soccer on Tuesdays, Thursdays, and Fridays. How many hours in all does Ricardo spend practicing soccer?
 - \bigcirc 8 $\frac{11}{12}$ hours
 - © $9\frac{3}{4}$ hours
 - \bullet 10 $\frac{7}{12}$ hours
 - ① $11\frac{1}{2}$ hours

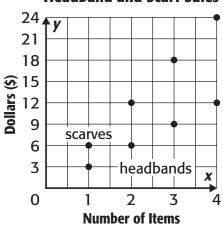
- **23.** Mr. Sims wants to buy fencing for a square lot that is 30.5 feet on each side. How many feet of fencing does he need?
 - (A) 61 feet
 - (B) 120.5 feet
 - 122 feet
 - (b) 930.25 feet
- **24.** A gym equally divided 330 towels so that each swimmer in a meet would get 4 towels. How many swimmers are at the meet?
 - **(F)** 80 swimmers
 - 82 swimmers
 - (H) 83 swimmers
 - ① 84 swimmers
- 25. Two sides of a triangular sign are 24 inches long. The third side is 18 inches long. What is the perimeter of the sign in feet?
 - $3\frac{1}{2}$ feet
 - B 4 feet
 - © $4\frac{1}{3}$ feet
 - ① $5\frac{3}{6}$ feet

- **26.** Cabins at a resort can sleep up to 48 guests. How many guests can 14 cabins sleep?
 - F 542 guests
 - © 572 guests
 - 672 guests
 - ① 682 guests

- **28.** The length of a robin's egg is 23.05 millimeters (mm). The length of a wren's egg is 20.85 millimeters. How much longer is the robin's egg?
 - **2.2** mm
 - © 2.75 mm
 - (H) 3.2 mm
 - ① 3.8 mm

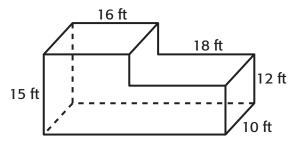
27. Mei sells headbands for \$3 each and scarves for \$6 each. The graph shows the dollar sales for each number of item.

Headband and Scarf Sales



- How much more does Mei make selling scarves than headbands?
- twice as much
- **®** three times as much
- © from 2 to 3 times as much
- (D) \$12 more for each scarf

29. What is the volume of the storage building?



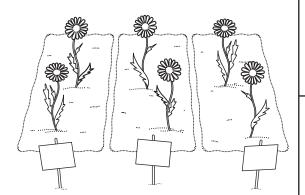
- (A) 2,400 ft³
- **B** 4,160 ft³
- © 4,460 ft³
- 4,560 ft³
- **30.** A medium apple weighs about $\frac{1}{4}$ pound. How many ounces does a bag of 8 medium apples weigh?
 - (F) 64 ounces
 - 32 ounces
 - (H) 16 ounces
 - ① 2 ounces

- **31.** Casey feeds her pot-bellied pig $1\frac{1}{3}$ cups of feed each day. How many cups of feed does her pig eat in 14 days?
 - (A) $4\frac{2}{3}$ cups

 - $18\frac{2}{3} \text{ cups}$
 - ① $23\frac{1}{3}$ cups

- 33. A hatchling Burmese python is 0.6 meter long. It can grow to be as long as 7 meters. If the hatchling grows to 7 meters, how many centimeters does it grow?
 - A 700 centimeters
 - 640 centimeters
 - © 70 centimeters
 - © 64 centimeters

32. Adam divided his garden into 3 equal sections. The total area of the garden is 49.2 square feet. What is the area of each section?



- F 8.2 square feet
- © 13.9 square feet
- (H) 14.8 square feet
- 16.4 square feet

34. What is the value of the expression?

$$10 + 5 \times \{12 \div [(9 - 7) \times 3]\}$$

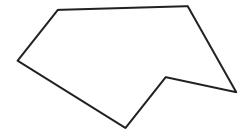
- **2**0
- **©** 30
- **H** 100
- ① 270
- **35.** Six pancakes have 72 grams (g) of carbohydrates. How many grams of carbohydrates are in one pancake, on average?
 - 12 g
 - **B** 66 g
 - © 78 g
 - **(b)** 432 g

- **36.** In a class vote on favorite vegetables, $\frac{5}{12}$ of the students voted for corn and $\frac{5}{12}$ voted for carrots. What fraction of the class did **not** vote for corn or carrots?
- **37.** Bobbie is getting ready for a marathon. She ran a total of 600 miles in the past 50 days. How many miles did she run each day on average?



- (A) 10 miles
- 12 miles
- © 14 miles
- (**D**) 120 miles

- 38. A grey whale's mass is about 85 kilograms. What is its mass in grams?
 - **(F)** 8,500 g
 - **85,000** g
 - (H) 850 g
 - ① 58,000 g
- **39.** In Kip's class, $\frac{3}{20}$ of the students are wearing sandals. What is this fraction written as a decimal?
 - (A) 0.32
 - **(B)** 0.3
 - 0.15
 - **(D)** 0.105
- **40.** What is the name of the polygon?



- (F) quadrilateral
- **©** pentagon
- (H) octagon
- hexagon

- **41.** Jordan saved the same amount of money each week for 7 weeks to pay for summer camp. He saved \$441 in all. The camp costs \$245 with another \$5 per day for activity fees. How much did Jordan save each week?
 - (A) \$28
 - **B** \$49
 - \$63
 - **(D)** \$98

- **42.** Ethan bought 2 action figures for \$25 each at a science fiction fair. He won an auction for a plastic sword, and he got a deal on 5 comic books for \$9 each. He spent \$102 altogether. How much did Ethan pay for the plastic sword?
 - **\$7**
 - **©** \$16
 - (H) \$27
 - \$32

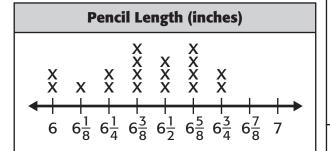
- **43.** Jacqui has $3\frac{1}{2}$ yards of fabric to make a costume. She used $\frac{1}{4}$ of the fabric to make a hat. How much of the fabric did she use?
 - (A) $\frac{3}{4}$ yard
 - \bullet $\frac{7}{8}$ yard
 - © 1 yard
 - ① $1\frac{1}{8}$ yards
- **44.** A walk-a-thon raised \$998.50. If 10 charities split the money equally, how much will each charity receive?
 - **(F)** \$9.99
 - © \$98.50
 - \$99.85
 - \$9,985

- **45.** Carlos paddled a canoe at an average rate of 6.32 miles per hour. How far did he travel in 2.5 hours?
 - 15.8 miles
 - (B) 15.7 miles
 - © 15.69 miles
 - 158 miles

- **46.** Gabriela used $\frac{1}{8}$ pound jalapeno peppers, $\frac{2}{3}$ pound chili peppers, and $\frac{7}{16}$ pound Anaheim peppers to make enchilada seasoning. About how many pounds of peppers did Gabriela use?
 - $0 + \frac{1}{2} + \frac{1}{2} = 1$ pound
 - $\bigcirc \frac{1}{2} + 1 + \frac{1}{2} = 2$ pounds

 - ① 1 + 1 + 1 = 3 pounds

47. The line plot shows the length of some pencils in Ashton's class.



How many times longer is the longest pencil than the shortest pencil?

- (a) $1\frac{1}{12}$ times as long
- $1\frac{1}{8}$ times as long
- © $1\frac{1}{6}$ times as long
- ① $1\frac{1}{4}$ times as long

- **48.** An art store has 10³ posters. If the store sells each poster for \$8, how much money will the store make on the posters?
 - **(F)** \$80
 - **©** \$240
 - (H) \$800
 - **\$8,000**
- **49.** Which **best** describes the triangle?



- (A) obtuse scalene
- **B** acute isosceles
- © right scalene
- right isosceles
- 50. Jani has a 750-milliliter water bottle she takes when hiking. If she fills it 3 times and drinks all of the water, how many liters of water does she drink?
 - **(F)** 2.15 liters
 - 2.25 liters
 - (H) 22.5 liters
 - ① 225 liters