

# **Grade 6 Mathematics Part B Online Practice Test - 1998**

**(Adapted from the 1998 Grade 6 Mathematics Achievement Test)**

## Grade 6 Mathematics Part B Online Practice Test - 1998 (Adapted from the 1998 Grade 6 Mathematics Achievement Test)

This test has one section containing 50 multiple-choice questions, each with a value of one mark

**This test is designed to be completed in 60 minutes; however, you may have an additional 30 minutes to complete the test, if you need it.**

### *Instructions*

- Read each question carefully.
- You may use manipulatives, including calculators, when answering the questions, but they are not necessary.
- Try to answer all the questions. If you cannot answer a question, go on to the next one. Click on the "Score Test!" button on the last page to get your score.

### *Multiple Choice*

- Each question has four possible answers from which you are to choose the **correct** or **best** answer.
- Locate the circle next to the letter that corresponds to your choice and click on it with your mouse's left button. The circle will fill in. In order to change your answer, click on a different circle. Try the example below.

### *Example*

This examination is for the subject of

- A. mathematics
- B. science
- C. language arts
- D. social studies

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## Archeological Dig

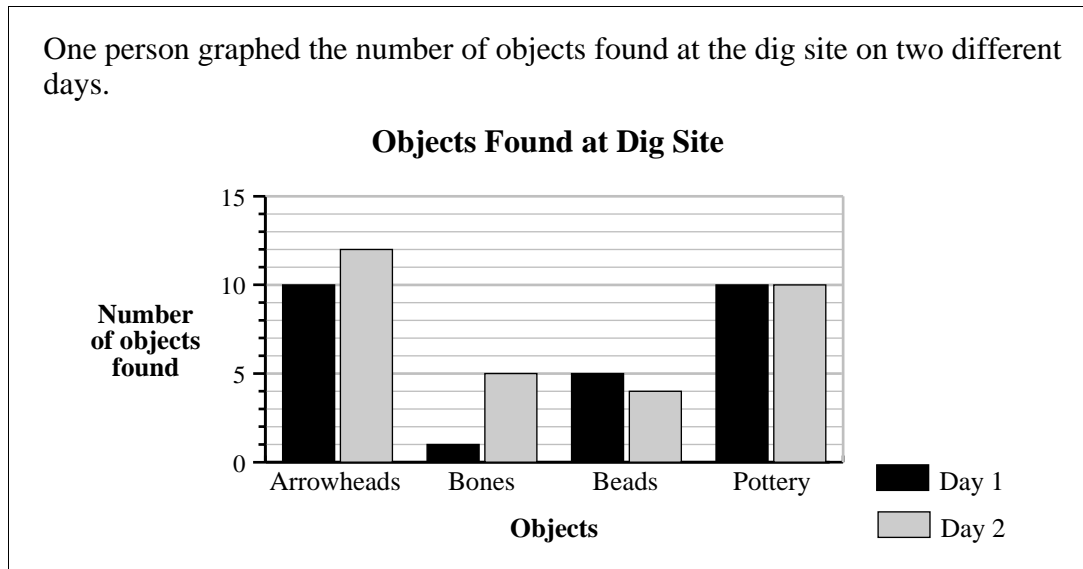
A number of people volunteer to work at an archeological dig during their vacation.

This graphic has been removed because copyright clearance was not granted.

The next eight questions are about activities at the dig site.

1. There are 28 volunteers on the dig team. If each volunteer moves 3 L of soil each hour, how much soil can the team move in 4 h?
  - A. 120 L
  - B. 336 L
  - C. 350 L
  - D. 844 L

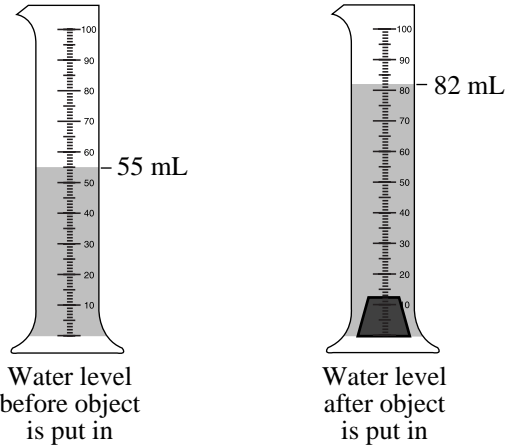
Use the following information to answer question 2.



2. The total number of objects that the team found on the first day was
- A. 10
  - B. 26
  - C. 31
  - D. 57

Use the following information to answer question 3.

Vicki found the volume of an object by measuring the amount of water that the object displaces.



3. What is the volume of the object?

- A. 137 cm<sup>3</sup>
- B. 82 cm<sup>3</sup>
- C. 55 cm<sup>3</sup>
- D. 27 cm<sup>3</sup>

\_\_\_\_\_

4. Jenny found a bone with a mass of 1.4 kg. How many grams is this?

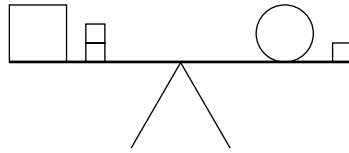
- A. 14 g
- B. 140 g
- C. 1 400 g
- D. 14 000 g

Use the following information to answer question 5.

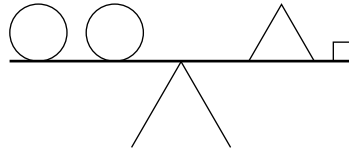
The team members compare items found at the dig site in many ways.

Matt found beads of different shapes and mass. He compared the mass of the beads by using a balance scale, as shown below.


**First Comparison**





**Second Comparison**




Mass and shape of beads found

 = 1 g

 = 3 g

 = ? g

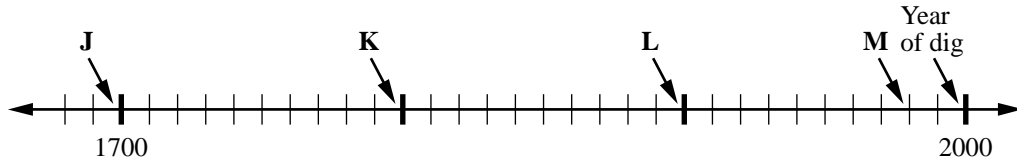
 = ? g

5. What is the mass of the triangular bead?

- A. 3 g
- B. 4 g
- C. 7 g
- D. 8 g

Use the following time-line to answer question 6.

In a pottery jar, a team member found a note. He recorded the year that the note was written on a time-line that he had constructed.



6. If the note was written about 2 centuries ago, what letter on the time-line represents the approximate year that the note was written?

- A. J
- B. K
- C. L
- D. M

Use the following information to answer questions 7 and 8.

One day, the archeologist bought ice-cream treats for the dig team. Their order was as follows:

Ice-Cream Treats	Quantity Bought
Jumbo Snow	4
Frozen Juice	10
Nice Ice Cream	4
I Scream	6
Waffle Cone	4

Price List

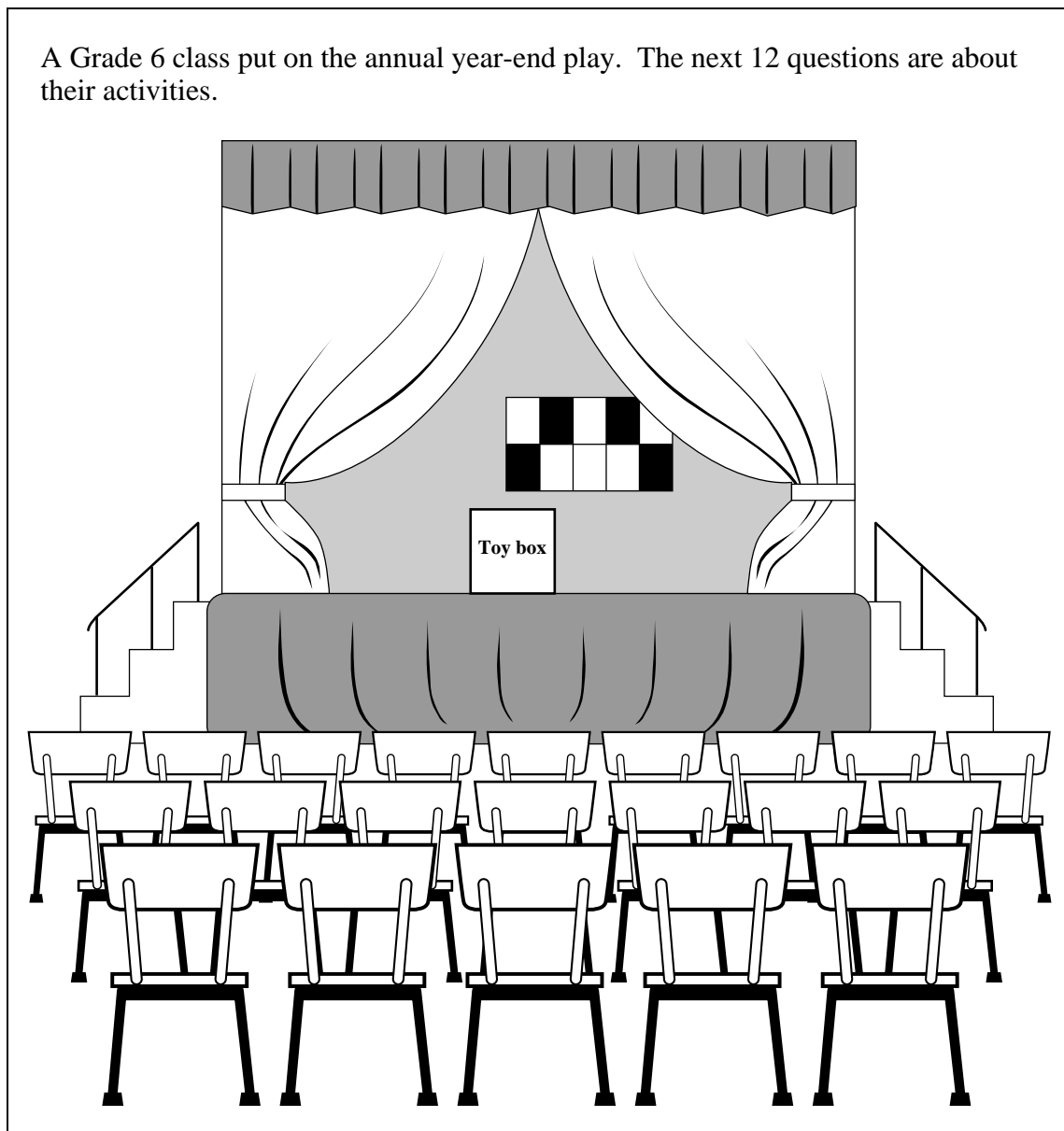
Jumbo Snow .....	\$2.01
Frozen Juice .....	\$0.98
Nice Ice Cream.....	\$1.12
I Scream .....	\$1.20
Waffle Cone .....	\$2.49

7. What is the difference in cost between the most expensive treat on the price list and the least expensive treat?
- A. \$1.03  
B. \$1.29  
C. \$1.48  
D. \$1.51
8. What is the total cost of the order?
- A. \$39.48  
B. \$39.00  
C. \$7.80  
D. \$7.08



## Year-End Play

A Grade 6 class put on the annual year-end play. The next 12 questions are about their activities.



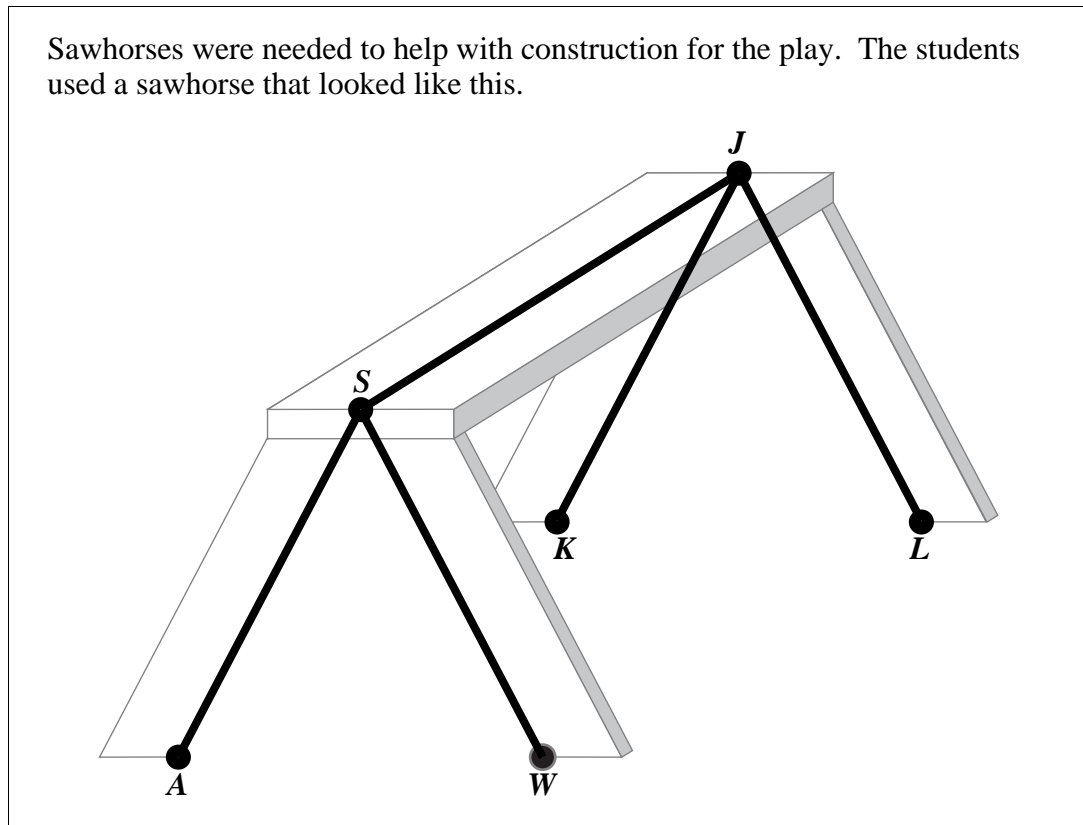
9. Chan had to record the identification number on the sound system that the school borrowed for the play. He noticed that two of the digits were missing:

\_\_\_\_\_ 0. \_\_\_\_\_ 9

The principal told Chan that the number has no two digits alike. What is the largest possible identification number?

- A. 90.99
  - B. 80.79
  - C. 70.89
  - D. 90.87
10. For the play, 5.8 m of fabric are needed for window curtains. If the fabric costs \$15.39/m, what is the best **estimate** of the cost of the fabric for the curtains?
- A. \$75
  - B. \$90
  - C. \$105
  - D. \$870

Use the following diagram to answer questions 11 and 12.



11. In the diagram, segment SW is parallel to segment

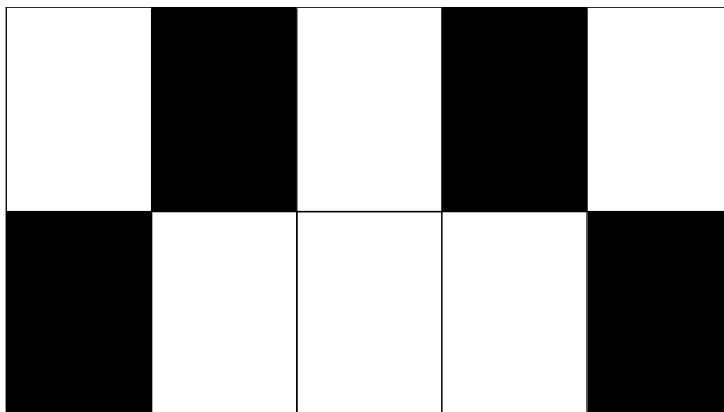
- A. JK
- B. JL
- C. SA
- D. SJ

12. What kind of angle is  $\angle WSA$  ?

- A. Right angle
- B. Acute angle
- C. Obtuse angle
- D. Straight angle

Use the following information to answer question 13.

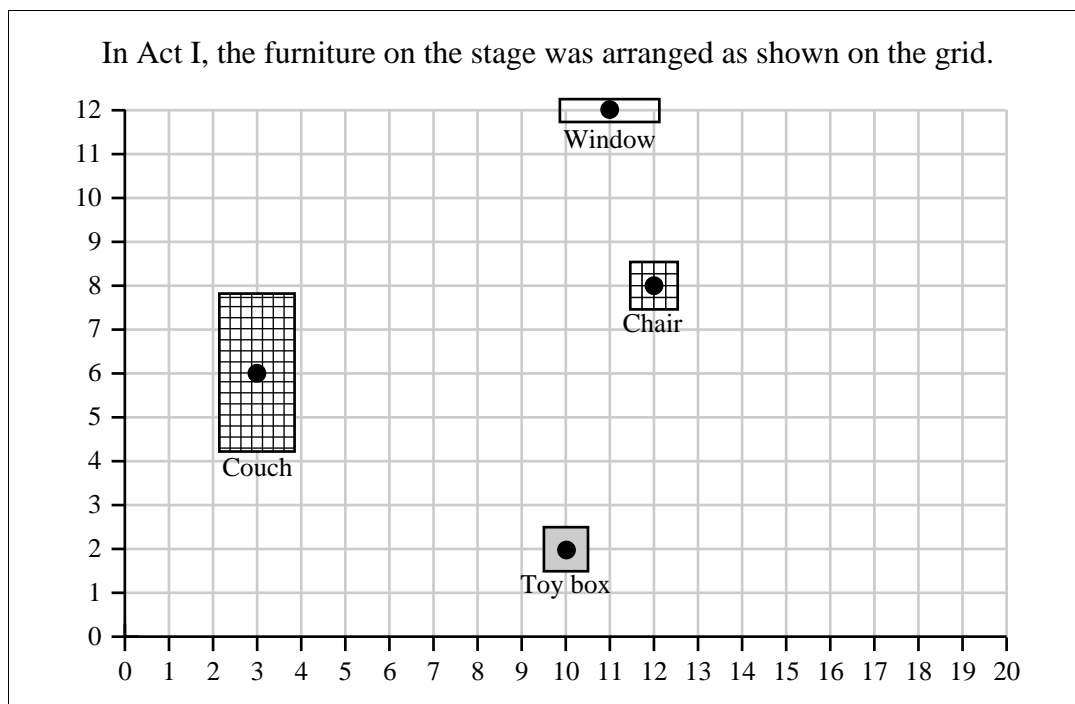
Bill was asked to paint a pattern on a window for the play. This is the pattern he painted.



13. What decimal fraction of the window did Bill paint a dark colour?

- A. 0.06
- B. 0.04
- C. 0.4
- D. 0.6

Use the following information to answer questions 14 and 15.



14. Which ordered pair shows the location of the toy box?
- A. (3, 11)
  - B. (11, 3)
  - C. (2, 10)
  - D. (10, 2)
15. After Act I, Tran moved the chair 5 spaces right and 1 space up. After he moved the chair, the coordinates of the chair were
- A. (17, 8)
  - B. (17, 9)
  - C. (16, 8)
  - D. (16, 9)

16. Bill and Jeff had to move a bed onto the stage for Act III. The mass of a bed is approximately
- A. 15 mg
  - B. 15 g
  - C. 15 kg
  - D. 15 t

*Use the following information to answer question 17.*

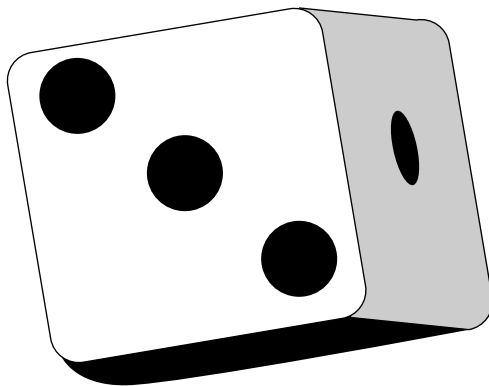
Ticket prices for the play were:

Adult	\$4.75
Senior	\$3.75
Child	\$2.25

17. One family spent \$17.75 on tickets. How many adult, senior, and child tickets did they buy?
- A. 1 adult, 2 senior, 2 child
  - B. 2 adult, 1 senior, 1 child
  - C. 2 adult, 1 senior, 2 child
  - D. 1 adult, 1 senior, 3 child
- 
18. Another family spent \$26.00 on tickets. The grandmother paid half the cost. Which division question will show how much she paid?
- A.  $26 \div 13 = ?$
  - B.  $26 \div 2 = ?$
  - C.  $2 \div 26 = ?$
  - D.  $13 \div 26 = ?$

Use the following information to answer question 19.

Sandy and Judy were playing a game backstage while they waited to go on stage. They rolled a regular six-sided die to find the number of spaces to move on the game board.



19. In order to win, Sandy needs to roll a four. What is the probability that he will roll a four on his next turn?

A.  $\frac{1}{6}$

B.  $\frac{1}{4}$

C.  $\frac{4}{6}$

D.  $\frac{2}{4}$

- 
20. The main character of the play was on stage for  $\frac{7}{10}$  of the first act. This could also be stated as

A. 70 %

B. 7 %

C. 0.7 %

D. 0.07 %

## Fundraising

The Prairieview community club held a fundraiser to buy new computers.

The next six questions are about the club's fundraising activities.

*Use the following information to answer questions 21 and 22.*

For the fundraiser, community club members were placed in five groups. They sold tins of mixed nuts. Total sales for each group are recorded in the chart below.

Group	Number of Group Members	Number of Tins Sold	Money Raised
A	31	1 615	\$2 422.50
B	29	1 405	\$2 107.50
C	30	1 420	\$2 130.00
D	31	1 600	\$2 400.00
E	30	1 510	\$2 265.00

21. If each computer costs \$3 295.00, what is the best estimate of the number of computers that can be purchased with the money raised?
- A. 3
  - B. 4
  - C. 5
  - D. 6
22. Ordered from the group that sold the greatest number of tins to the group that sold the least number of tins, the groups are
- A. D, B, C, A, E
  - B. B, C, E, D, A
  - C. A, D, E, B, C
  - D. A, D, E, C, B



**23.** For each tin of mixed nuts sold, the club made \$1.50. Arpanna sold 64 tins, Tom sold 36 tins, and Daniel sold 49 tins. To find the total amount of money raised by these three club members, Daniel added the number of tins of mixed nuts they sold and then

- A.** multiplied the total by 3
- B.** divided the total by 3
- C.** multiplied the total by \$1.50
- D.** divided the total by \$1.50

**24.** When the volunteers finished counting the money raised in one week, they wrote the total amount like this:

$$(1 \times 100) + (3 \times 1\,000) + (2 \times 10) + (8 \times 0.1) + (5 \times 1)$$

The club treasurer rewrote this as

- A.** \$1 302.85
- B.** \$1 382.50
- C.** \$3 128.05
- D.** \$3 125.80

Use the following information to answer questions 25 and 26.

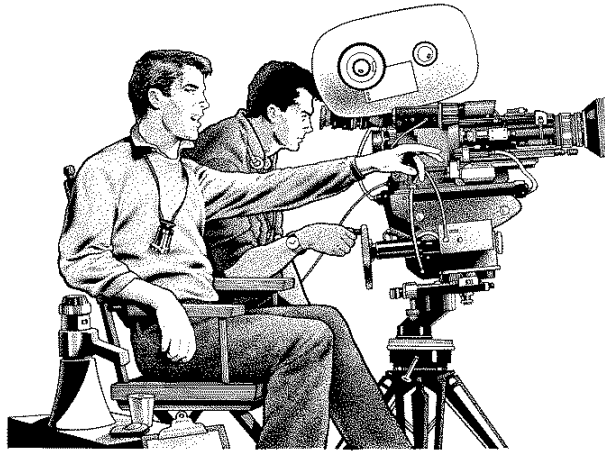
The community club also runs a concession for events at the community hall.

The prices of four products that they buy in bulk are listed below.

potato chips	\$1.99/200 g
corn chips	\$5.99/kg
peanut snacks	\$2.49/500 g
cheese snacks	\$0.75/50 g

25. Which of the four products has the **lowest cost per gram**?
- A. Potato chips
  - B. Corn chips
  - C. Peanut snacks
  - D. Cheese snacks
26. The cost of 2 kg of peanut snacks and 1 kg of potato chips is
- A. \$4.48
  - B. \$9.96
  - C. \$14.48
  - D. \$19.91

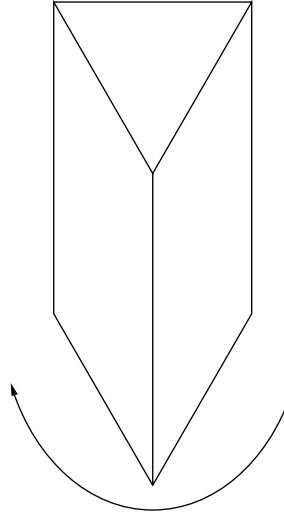
Kyle and Jennifer visit a studio where a movie is being produced.



The next ten questions are related to their visit.

Use the following diagram to answer question 27.

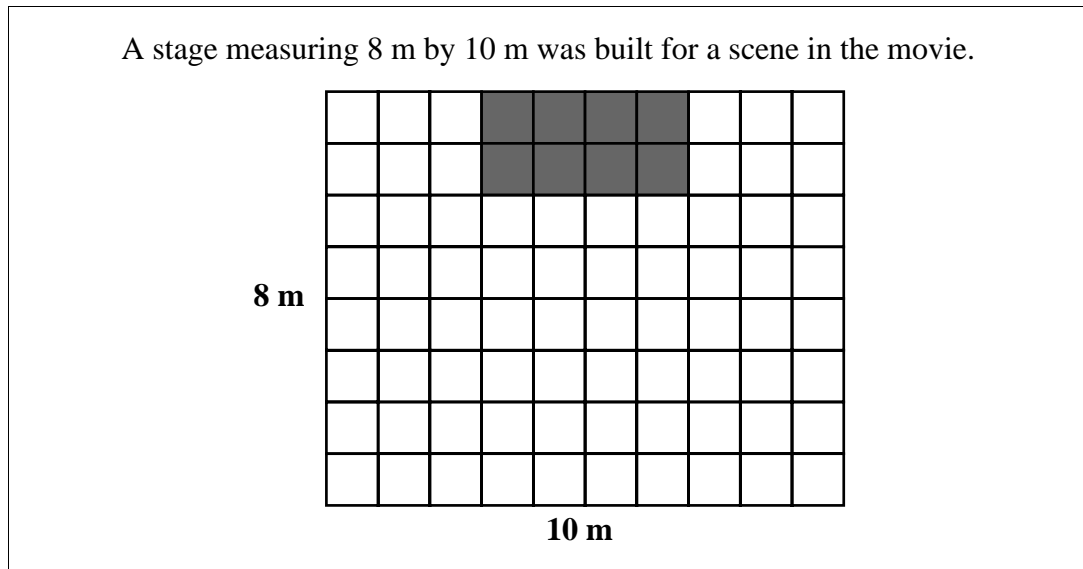
A turning backdrop was built in the shape of a triangular prism. A different scene will be painted on each vertical face.



27. How many scenes will be on the turning backdrop?

- A. 1
- B. 2
- C. 3
- D. 5

Use the following diagram to answer questions 28 and 29.

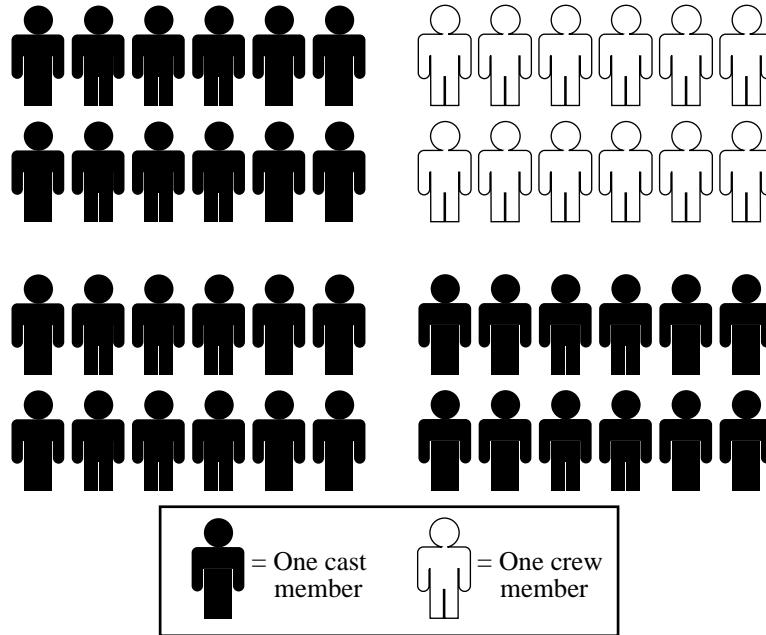


28. The perimeter of the stage is
- A. 18 m
  - B. 36 m
  - C. 54 m
  - D. 80 m
29. The shaded area of the stage is painted a dark colour. What fraction of the stage is painted?
- A.  $\frac{1}{3}$
  - B.  $\frac{1}{5}$
  - C.  $\frac{1}{10}$
  - D.  $\frac{1}{20}$

Use the picture below to answer question 30.

The movie director called for all of the members of cast and crew to assemble on the stage.

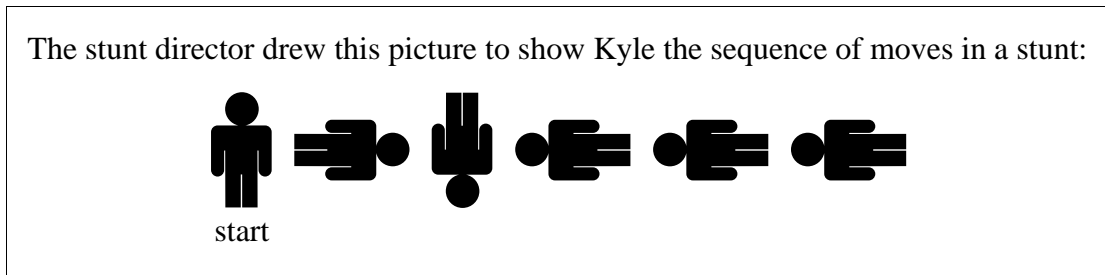
Jennifer represented all of the cast and crew in the movie like this:



30. The ratio of **cast to crew** members is

- A. 3 to 1
- B. 1 to 3
- C. 1 to 6
- D. 12 to 6

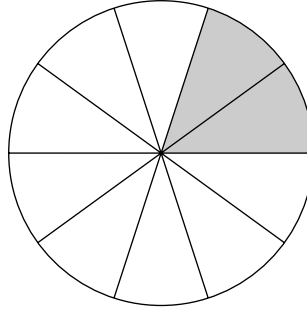
Use the following information to answer question 31.



31. This sequence could be described as
- A. turn, turn, turn, slide, slide
  - B. turn, slide, turn, slide, turn
  - C. turn, turn, slide, slide, slide
  - D. slide, slide, turn, turn, turn
- 
32. An “extra” actor earns \$85/day working on the set of the movie. What is the best estimate of how much an “extra” earns for working 20 days?
- A. \$180
  - B. \$500
  - C. \$1 000
  - D. \$2 000
33. On the first day of filming, the crew arrived on the set at 5:20 A.M. They left the set at 8:15 P.M. How long did the crew spend on the set that day?
- A. 3 h 5 min
  - B. 5 h 5 min
  - C. 13 h 35 min
  - D. 14 h 55 min

Use the following information to answer questions 34 and 35.

Kyle and Jennifer ate pizza for lunch with the cast and crew. Each pizza was cut into 10 pieces, as shown below. The shaded portion shows the amount each person ate.



34. What are the fewest pizzas needed to feed 50 people?

- A. 5
- B. 10
- C. 15
- D. 20

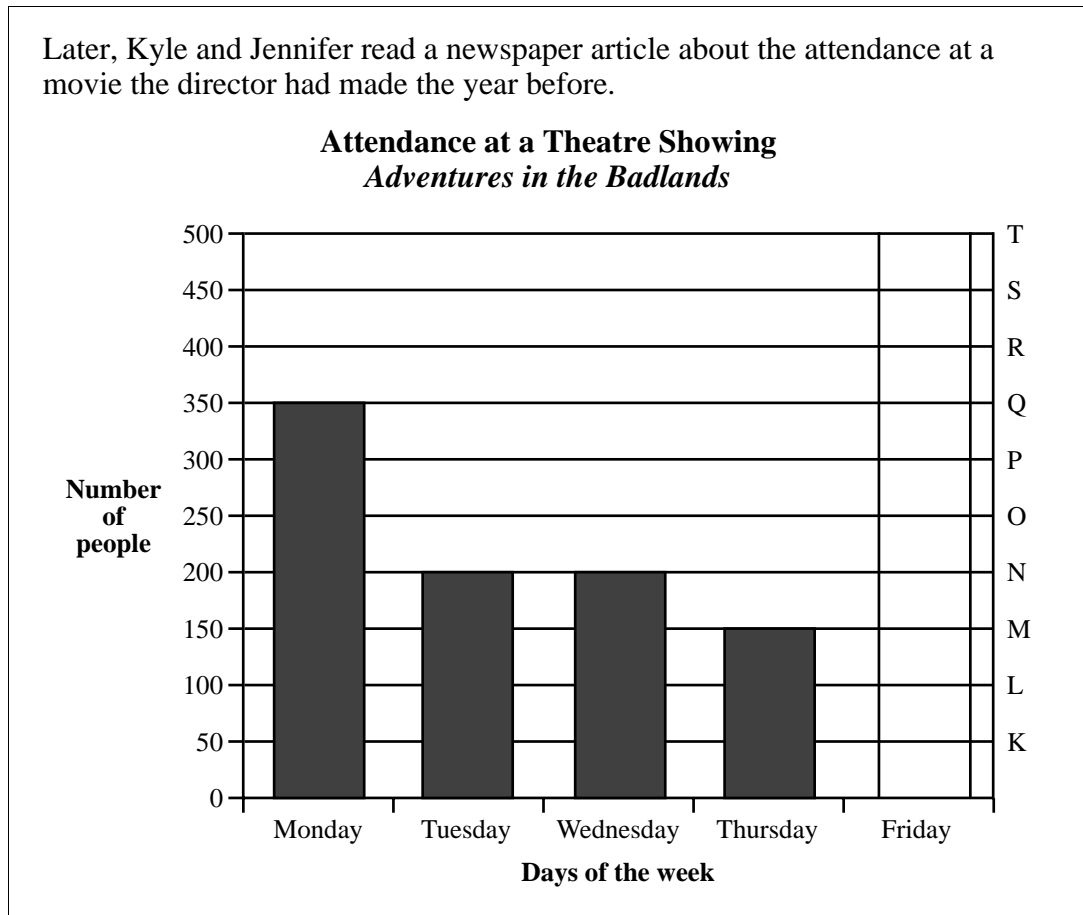
35. What fraction of a pizza did each person eat?

- A.  $\frac{1}{10}$
- B.  $\frac{2}{8}$
- C.  $\frac{2}{5}$
- D.  $\frac{1}{5}$



Use the graph below to answer question 36.

Later, Kyle and Jennifer read a newspaper article about the attendance at a movie the director had made the year before.



36. The attendance on Friday was triple the attendance on Thursday. To graph the attendance for Friday, a bar should be drawn up to line
- A. L
  - B. P
  - C. S
  - D. T

As part of a Canadian travel program, an Alberta Travel Club is hosting a group from Ontario.

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The next 14 questions are about the group's trip to Alberta and some of their activities.

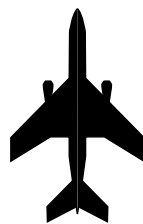
Use the following information to answer question 37.

<b>Plane Ticket Prices from Toronto to Edmonton</b>	
	Price per person
Adults	\$1 675.00
Children	\$920.00

37. The total cost of the plane tickets for the group from Ontario is \$30 550.00. If there are 15 children, how many adults are in the group?
- A. 10
  - B. 15
  - C. 25
  - D. 30

Use the following information to answer question 38.

After the group boards, the plane taxis toward the runway and makes a turn.



38. What does the plane look like after a  $90^\circ$  counterclockwise turn?

A.



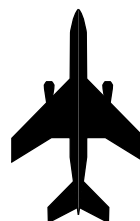
B.



C.



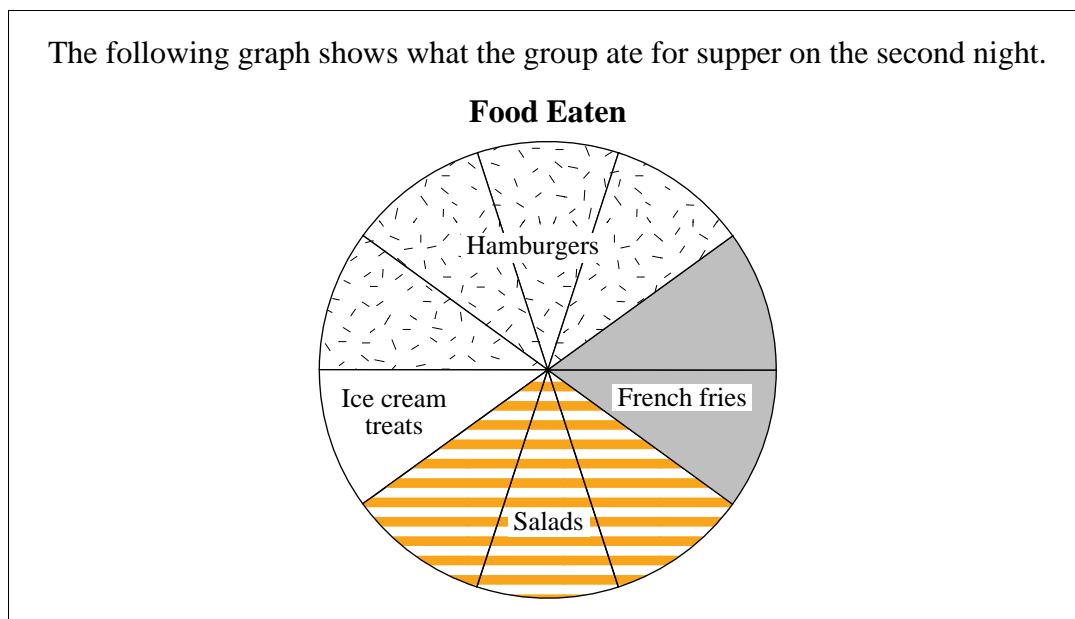
D.



39. All of the 60 hosts from Alberta and 15 of the group from Ontario visit the Provincial Museum. The ticket purchased by the first person in the group is number 149. People with ticket numbers that are multiples of 4 are given a coupon for a free pop. How many people receive a coupon for a free pop?

- A. 15
- B. 18
- C. 60
- D. 64

Use the following information to answer question 40.



40. Hamburgers and French fries represent what percentage of the total food that the group ate?
- A. 20%
  - B. 40%
  - C. 50%
  - D. 60%
- 
41. The group attends a carnival at which 25% of the people are given balloons. What fraction of the people are given balloons?
- A.  $\frac{1}{25}$
  - B.  $\frac{25}{10}$
  - C.  $\frac{1}{4}$
  - D.  $\frac{25}{4}$

Use the following information to answer question 42.

At a souvenir booth, a variety of items are sold.

Ball cap	\$ 7.98
T-shirt	\$16.82
Pin	\$ 1.25
Balloon	\$ 0.50
Banner	\$ 8.76

42. If Alison buys 3 items that cost a total of \$26.05, what items does she buy?
- A. Three ball caps
  - B. Two ball caps and one T-shirt
  - C. One ball cap, one T-shirt, and one pin
  - D. Three banners
- 
43. At the dart-throw game, Darcy takes four throws. Each of his scores is a multiple of 3. Which of the following scores are Darcy's?
- A. 3, 21, 26, 30
  - B. 9, 13, 19, 27
  - C. 12, 24, 15, 33
  - D. 18, 22, 36, 16
44. Sam sees a large jar full of jelly beans in a booth at the carnival. She guesses that the jar contains four thousand seven hundred ninety-six jelly beans. What digit is in the tens place of this number?
- A. 4
  - B. 6
  - C. 7
  - D. 9

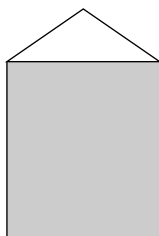
Use the following information to answer question 45.

In order to win a Ring Toss game, a person has to get three rings over one of these objects:

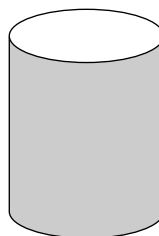
triangular prism  
hexagonal prism  
triangular pyramid  
cylinder  
octagonal prism

45. Which of the following objects is **not** listed above?

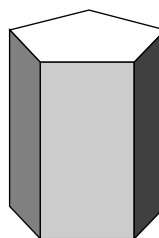
A.



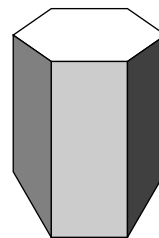
B.



C.



D.



Use the following information to answer question 46.

Carrie plays a game called “Number Find.” The object of the game is to determine the missing number in a set of numbers. Carrie is given the following set of numbers.

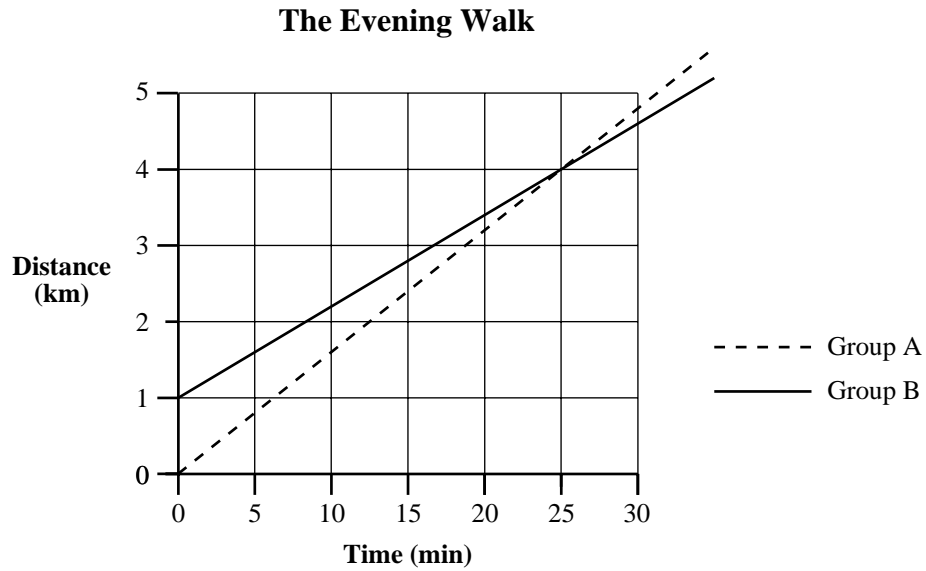
4	16		256	1 024
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46. What is the missing number?
- A. 20
  - B. 64
  - C. 240
  - D. 256
- 
47. The roller coaster can hold 16 people at one time. What is the greatest number of people that can ride the roller coaster in  $1\frac{1}{2}$  h if each ride takes a total of 3 min?
- A. 30 people
  - B. 90 people
  - C. 270 people
  - D. 480 people



Use the following information to answer question 48.

One evening, two groups of people walk on a path in the river valley. When Group A starts, Group B is 1 km ahead. The following graph shows the distance and time travelled by the groups after Group A starts walking.



48. How many minutes does it take Group A to catch up to Group B?
- A. 20 min
  - B. 23 min
  - C. 25 min
  - D. 30 min

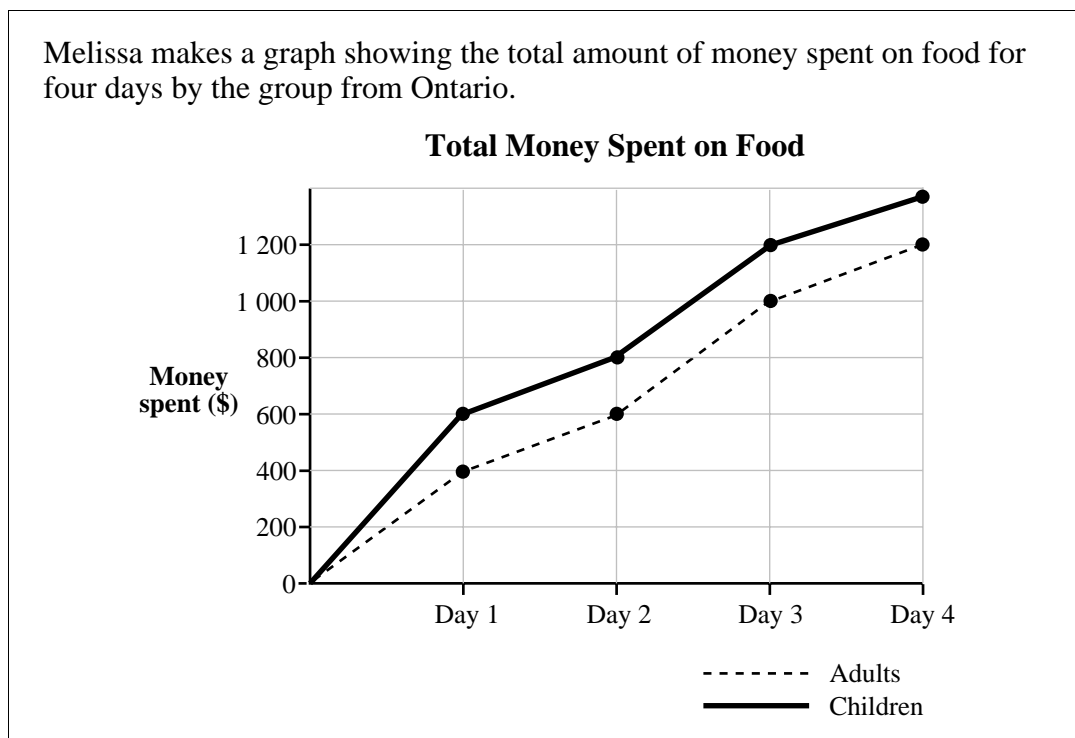
*Use the following information to answer question 49.*

During the last evening of the trip, 10 people are flipping coins. Each person flips one coin 10 times.

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49. What is the **most probable** number of times that the coin will land “heads up”?
- A. 10 times
  - B. 30 times
  - C. 50 times
  - D. 70 times

Use the following information to answer question 50.



50. What is the difference in the amount of money spent on day 1 by the adults and the amount of money spent on day 1 by the children?
- A. \$1 000
  - B. \$600
  - C. \$400
  - D. \$200