

- 1** A grocery store ordered 1 000 boxes of candies online.

Each box of candies cost \$1.70.

How much did the grocery store pay for the boxes of candies that they ordered?

A \$170 000

B \$17 000

C \$1 700

D \$170

E \$17

- 2** A dam construction project used 215 bags of cement to build each section of the dam.

If the dam project had a total of 66 sections, how many bags of cement did the construction project use in all?

A 13 720 bags of cement

B 13 840 bags of cement

C 13 960 bags of cement

D 14 190 bags of cement

E 14 230 bags of cement

- 3** The local library received a donation of 108 boxes of books.

Each box donated contained 324 books.

How many books did the local library receive in all?

- A** 34 992 books
- B** 34 926 books
- C** 34 812 books
- D** 34 676 books
- E** 34 524 books

- 4** Roger was playing a video game where he needed to collect ruby coins.

He can exchange 12 ruby coins for 1 power-up crystal.

If Roger collected a total of 820 ruby coins, what is the greatest number of power-up crystals he can exchange?

- A** 67 power-up crystals
- B** 68 power-up crystals
- C** 69 power-up crystals
- D** 70 power-up crystals
- E** 71 power-up crystals

- 5** Jimmy downloaded two files with a total size of 64.76 gigabytes.

One of the files was 33.4 gigabytes.

How many gigabytes was the second file that Jimmy downloaded?

- A** 30.36 gigabytes
 - B** 30.56 gigabytes
 - C** 30.72 gigabytes
 - D** 31.36 gigabytes
 - E** 31.72 gigabytes
- 6** Jack started saving money for a video game he wanted to buy.

He saved \$8 on the first week, \$12 on the second week, \$16 on the third week, and \$24 on the fifth week.

If the amount of money he saved each week followed a pattern, how much did he save in the fourth week?

- A** \$18
- B** \$19
- C** \$20
- D** \$21
- E** \$22

- 7 Last weekend, Peter drove his car from Newport to Carlton, a distance of $12\frac{2}{3}$ kilometres, and then drove from Carlton to Sunnyville, a distance of $8\frac{5}{6}$ kilometres.

How far did Peter drive from Newport to Sunnyville?

- A $21\frac{1}{2}$ kilometres
- B $21\frac{1}{3}$ kilometres
- C $21\frac{1}{6}$ kilometres
- D $20\frac{2}{3}$ kilometres
- E $20\frac{1}{2}$ kilometres
- 8 A restaurant had 34 bags of potatoes that they split evenly to make 6 batches of potato pie.

How many bags of potatoes did the restaurant use to make each batch of potato pie?

- A $4\frac{1}{2}$ bags
- B $4\frac{5}{6}$ bags
- C $5\frac{1}{3}$ bags
- D $5\frac{2}{3}$ bags
- E $5\frac{3}{4}$ bags

9 It took one-fifth of a ream of paper to print one pocketbook.

How many pocketbooks can be printed using 3 reams of paper?

- A 3 pocketbooks
- B 5 pocketbooks
- C 6 pocketbooks
- D 10 pocketbooks
- E 15 pocketbooks

10 Each of the five buckets below is partially filled with oil.



$\frac{1}{2}$ of a litre



$\frac{1}{4}$ of a litre



$\frac{3}{4}$ of a litre



$\frac{1}{4}$ of a litre



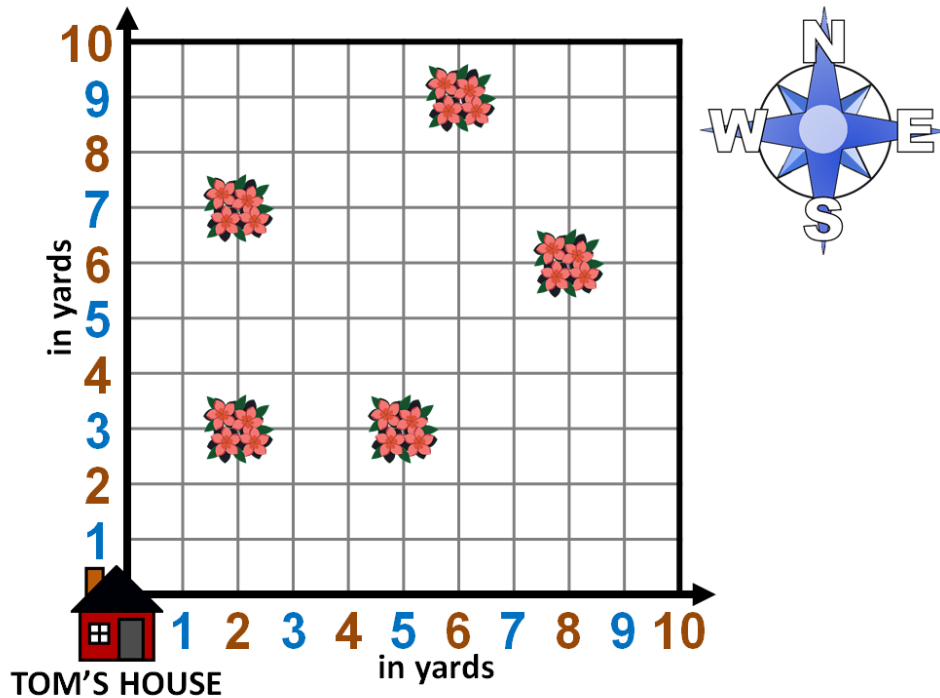
$\frac{3}{4}$ of a litre

The labels below each bucket show the amount of oil inside the bucket.

If all the oil in the five buckets will be redistributed such that each bucket will have the same amount of oil, how much oil should be put in one bucket?

- A $\frac{1}{8}$ of a litre
- B $\frac{1}{4}$ of a litre
- C $\frac{3}{8}$ of a litre
- D $\frac{1}{2}$ of a litre
- E $\frac{5}{8}$ of a litre

- 11 The coordinate plane below shows Tom's house and the locations of five garden patches.

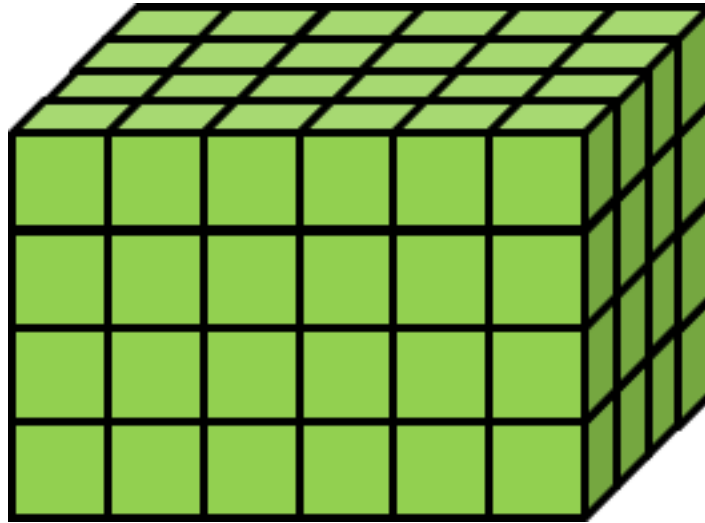


Tom wanted to make a sixth garden patch but wanted to make sure that it is at least 2 yards from any of the pre-existing garden patches.

Which of the following locations should he make the sixth garden patch?

- A 5 yards East (E) and 6 yards North (N) of his house.
- B 3 yards East (E) and 4 yards North (N) of his house.
- C 6 yards East (E) and 3 yards North (N) of his house.
- D 4 yards East (E) and 3 yards North (N) of his house.
- E 5 yards East (E) and 9 yards North (N) of his house.

12 The rectangular solid below is made up of unit cubes.



Which of the following determines the volume, in cubic units, of the rectangular solid?

A $(6 \times 2) + (4 \times 2) + (3 \times 2)$

B $6 \times 4 \times 4$

C $6 + 4 + 3$

D $6 \times 4 \times 3$

E $(6 \times 4) + (6 \times 3) + (4 \times 3)$

- 13** Jordan drew a quadrilateral with the following properties:
- The quadrilateral does not have four right angles.
 - The quadrilateral has two pairs of opposite angles with the same degree measure.
 - The lengths of the sides of the quadrilateral are equal.

Which of the following could be the quadrilateral that Jordan drew?

- I. Square
- II. Rhombus
- III. Trapezoid

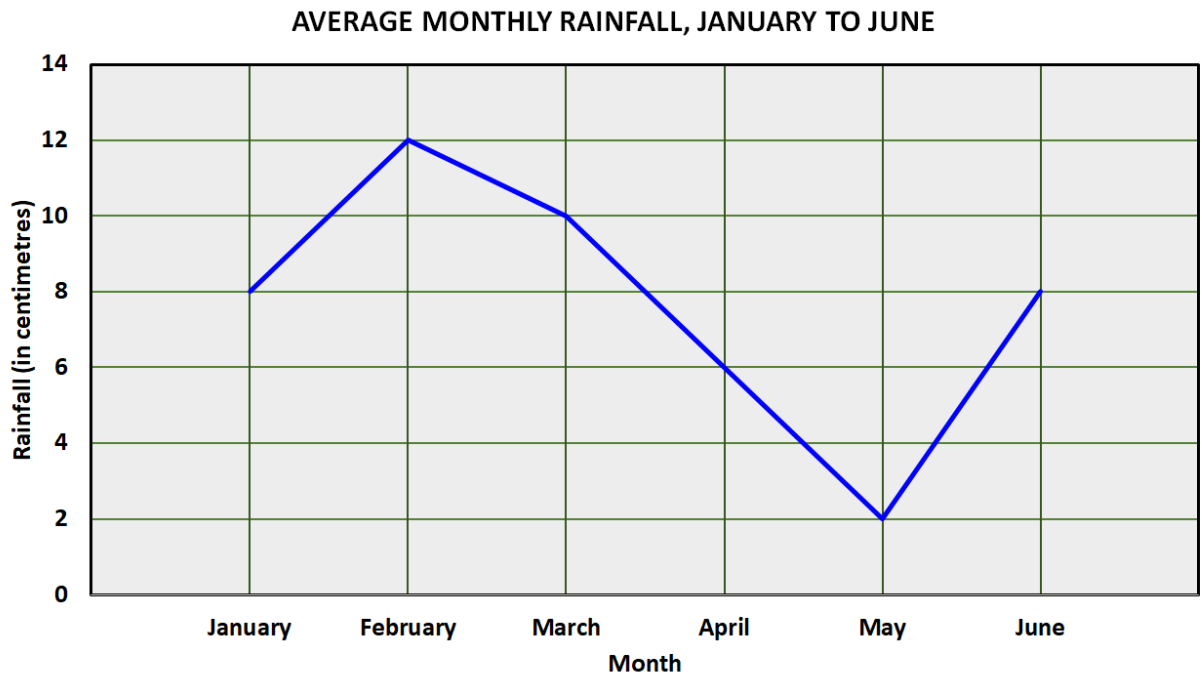
- A** I only
- B** II only
- C** III only
- D** I and II only
- E** II and III only

- 14** Jessica's piano lesson started at 25 minutes past 8 o'clock.

What time will her piano lesson end if it will last 1 hour and 40 minutes?

- A** 9:05
- B** 9:20
- C** 9:25
- D** 9:40
- E** 10:05

- 15 The line graph below shows the average monthly rainfall in the town of Sicily from January to June.



Based on the line graph, which of the following statements is true?

- A** The average monthly rainfall in February was 2 centimetres higher than the average monthly rainfall in January.
- B** The average monthly rainfall in March was 1 centimetre lower than the average monthly rainfall in February.
- C** The average monthly rainfall in April was 4 centimetres lower than the average monthly rainfall in March.
- D** The average monthly rainfall in May was 2 centimetres lower than the average monthly rainfall in April.
- E** The average monthly rainfall in June was 3 centimetres higher than the average monthly rainfall in May.

- 16** A beach resort charges \$180 per day for the first seven days of stay and \$100 per day for each additional day after the first seven days.

How much does it cost to stay at the beach resort for 23 days?

- A** \$1 600
 - B** \$2 740
 - C** \$2 820
 - D** \$2 860
 - E** \$2 890
- 17** Paints are sold for \$4.80 per litre, and a litre of paint can cover an area of 20 square metres.

How much does it cost to paint the outside of a cube with an edge of 10 metres?

- A** \$94
- B** \$144
- C** \$194
- D** \$240
- E** \$294

- 18** Carl and Patricia had been married for 5 years now, and Patricia's age now is $\frac{7}{8}$ of Carl's age.

If Carl was 27 years old when he married Patricia, how old is Patricia today?

- A** 24 years old
 - B** 26 years old
 - C** 28 years old
 - D** 30 years old
 - E** 32 years old
- 19** Among the members of the Book Club, 40 percent have a Master's degree.

Among the members who do not have a Master's degree, 50 are college graduates and the other 55 are still in college.

How many members does the Book Club have?

- A** 175 members
- B** 200 members
- C** 225 members
- D** 250 members
- E** 275 members

20 The average (arithmetic mean) mass of two boxes is 375 kilograms.

Twice the mass of the first box is 300 kilograms more than the mass of the second box.

What is the mass of the first box?

A 225 kilograms

B 300 kilograms

C 350 kilograms

D 372 kilograms

E 450 kilograms

21 A store sells ceramic pots and clay pots only.

Clay pots are sold for \$16 each, which is 40 percent of the price of each ceramic pot.

If the store sells 250 pots, $\frac{3}{5}$ of which are ceramic pots, how much money did the store receive from the sale of the pots?

A \$3 500

B \$5 000

C \$6 000

D \$6 400

E \$7 600

22 Three chairs and a table cost \$225 while 2 chairs and a table cost \$170.

How much do 2 chairs cost?

- A** \$55
- B** \$100
- C** \$110
- D** \$130
- E** \$180

23 Terry had only 5-dollar and 10-dollar bills in his wallet.

He had 2 more 5-dollar bills than 10-dollar bills.

If the total value of the bills in his wallet was \$100, how many 10-dollar bills did Terry have?

- A** Two
- B** Four
- C** Six
- D** Eight
- E** Ten

- 24** The Accounting Department had only 15 senior accountants and 75 junior accountants.

The average annual salary of all the senior accountants was \$120 000.

The average annual salary of all the junior accountants was \$30 000.

What was the average annual salary of all the accountants in the Accounting Department?

- A** \$35 000
 - B** \$45 000
 - C** \$55 000
 - D** \$65 000
 - E** \$75 000
- 25** A pouch contains 80 coins that are either gold or silver only.

Each silver coin has a mass of 50 grams and each gold coin has a mass of 70 grams.

If the total mass of the coins in the pouch is 4.6 kilograms, how many gold and silver coins are there? (1 kilogram = 1 000 grams)

- A** 70 gold coins and 10 silver coins
- B** 60 gold coins and 20 silver coin
- C** 50 gold coins and 30 silver coins
- D** 40 gold coins and 40 silver coins
- E** 30 gold coins and 50 silver coins

26 Three students are selling boxes of cookies to raise money for charity.

During the first week of selling, the 3 students sold an average (arithmetic mean) of 20 boxes of cookies each.

In each of the 3 following weeks, the three students sold twice as many boxes of cookies as they did the previous week.

How many boxes of cookies did the three students sell during the four weeks?

- A** 120 boxes
- B** 240 boxes
- C** 300 boxes
- D** 600 boxes
- E** 900 boxes

27 A 50-litre solution is 3 percent salt by volume.

How many litres of water must be removed from the solution to produce a solution that is 5 percent salt by volume?

- A** 2 litres
- B** 4 litres
- C** 6 litres
- D** 10 litres
- E** 20 litres

28 Rupert sold all the baseball cards in his collection.

He sold 25 percent of the baseball cards for \$12 each, 35 percent for \$8 each, and the remaining for \$6.50 each.

What percentage of Rupert's earnings from the sale of the baseball cards came from the cards that were sold for \$8 each?

A 18 percent

B 21 percent

C 26 percent

D $33\frac{1}{3}$ percent

E $37\frac{1}{2}$ percent

29 A writer gets \$1.50 for each of the first 2 500 copies of his book sold and \$2.50 for each additional copy sold.

If 3 000 copies of his book were sold during the book signing event, how much money did he earn during the book signing event?

A \$11 250

B \$6 750

C \$5 000

D \$3 750

E \$1 250

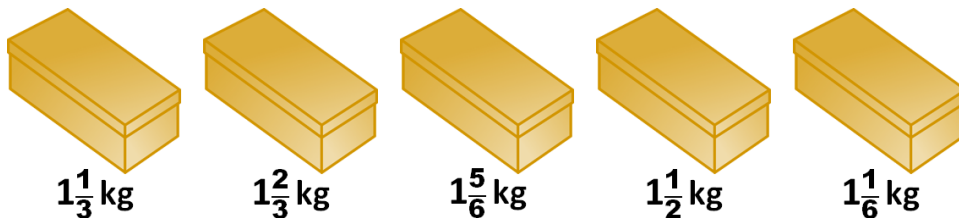
- 30 A survey was conducted in two cities to check the consumer's preference for the new flavour of ice cream.

The result of the survey is shown in the table below.

	LIKES	DISLIKES
CITY A	63 percent	37 percent
CITY B	48 percent	52 percent

If 400 people from City A were surveyed and 600 people from City B were surveyed, what percentage of the total number of people surveyed from the two cities liked the new flavour of ice cream?

- A 45 percent
- B 48 percent
- C 54 percent
- D 56 percent
- E 63 percent
- 31 George had five boxes of marbles that were partially full.



The labels below each box show the amount of marbles inside the box.

If George wanted to reorganise the marbles such that each box will contain the same amount of marbles, how many kilograms of marbles should he put in each box?

- A $1\frac{1}{2}$ kilograms

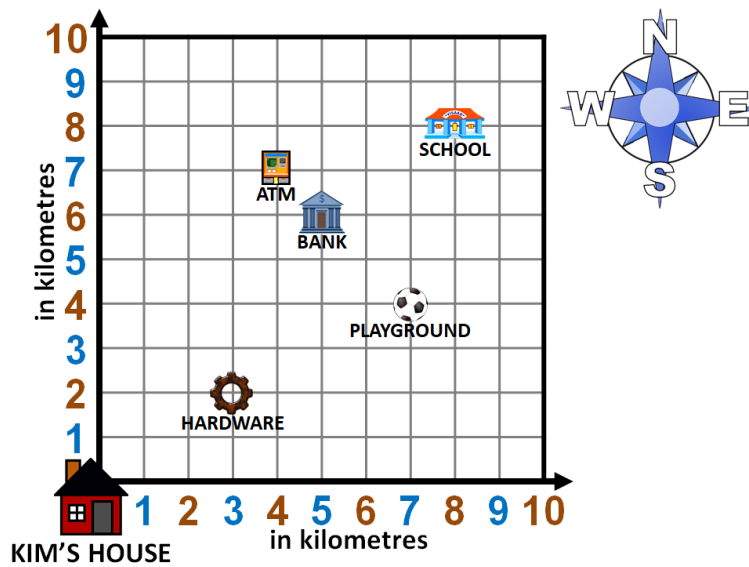
B $1\frac{3}{5}$ kilograms

C $\frac{1}{2}$ kilograms

D 1 kilogram

E $\frac{1}{3}$ kilograms

32 The grid below shows Kim's house and some locations around her town.



If Kim drove 7 kilometres East (E) and 4 kilometres North (N) from her house, to which location did she go?

A Hardware

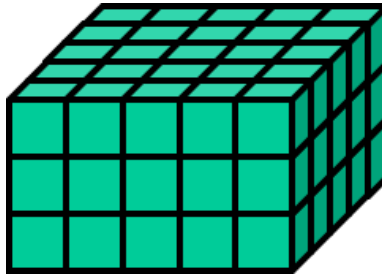
B ATM

C Playground

D Bank

E School






33 The rectangular solid below is made up of unit cubes.



What is the volume of the rectangular solid?

- A 75 cubic units
- B 70 cubic units
- C 65 cubic units
- D 60 cubic units
- E 100 cubic units

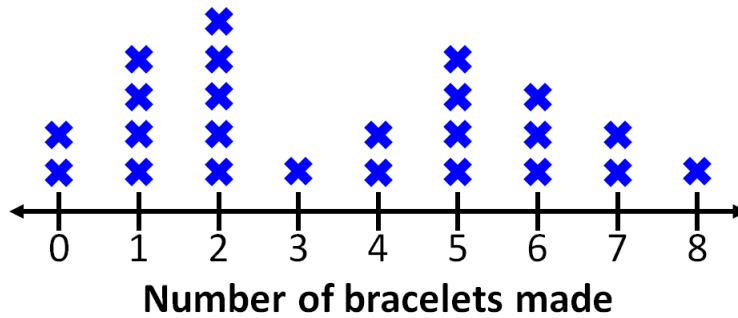
34 The picture graph below shows the number of points scored by each team in their first game of the season.

Points Scored Per Team	
Team 1	
Team 2	
Team 3	
Team 4	
KEY:  = 8 points	

How many more points did Team 3 score in their first game of the season than Team 4?

- A 16 points
- B 24 points
- C 32 points
- D 40 points
- E 3 points

35 Miss Jones kept track of the number of bracelets her students made last week with the line plot below.



How many of her students made fewer than 3 bracelets last week?

- A 6 students
- B 8 students
- C 11 students
- D 15 students
- E 26 students