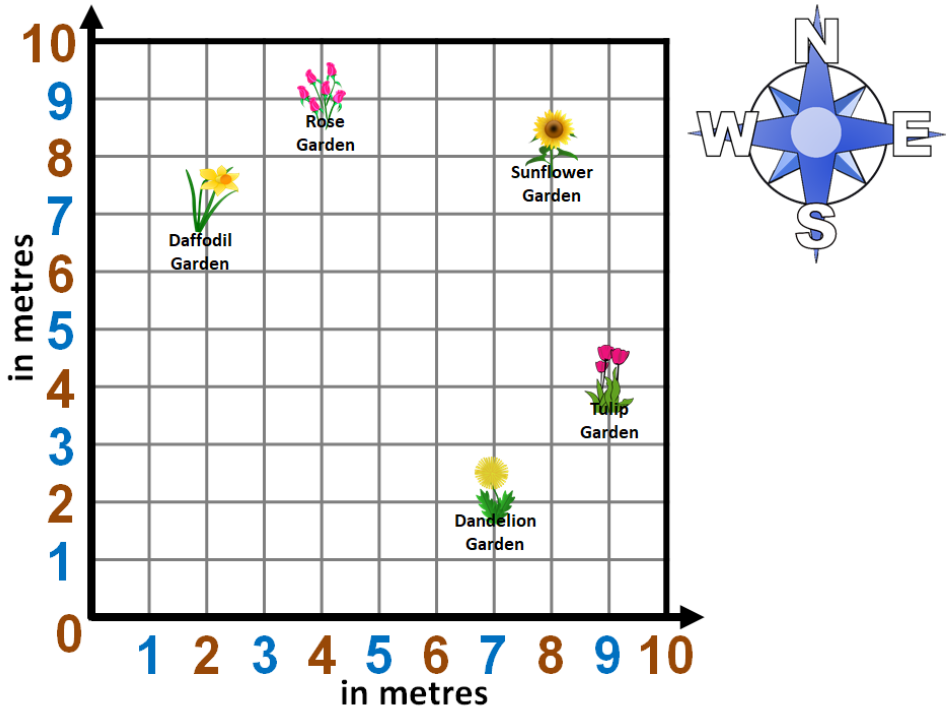
1 The grid below shows the locations of five flower gardens inside the park.



The entrance of the park is located at (0, 0).

What flower garden is located 9 metres East (**E**) and 4 metres North (**N**) of the entrance?

A Daffodil garden

B Dandelion garden

C Rose garden

D Tulip garden

E Sunflower garden

2 Jane bought 2 cartons of milk, each containing 450 millilitres.

Jane used **m** millilitres of the milk to make some pancakes.

She was left with 300 millilitres.

Which of these equations can help you find the value of **m**?

A $(2 \times 450) - \mathbf{m} = 300$

B $2 \times (450 - 300) = \mathbf{m}$

C $2 \times (450 - \mathbf{m}) = 300$

D $(450 \div 2) - \mathbf{m} = 300$

E $(450 - 300) \div 2 = \mathbf{m}$

3 The concert organisers estimated the number of attendees at the concert by rounding the actual number of attendees to the nearest hundred.

The estimated number of attendees at the concert was 12 300.

Which of these could be the actual number of attendees at the concert?

A 12 225

B 12 247

C 12 312

D 12 352

E 12 378

4 Cynthia bought some balls of yarn to knit some bracelets.

She can knit 40 bracelets per ball of yarn.

If Cynthia had already knitted 130 bracelets, and the remaining balls of yarn can still be knitted into 150 more bracelets, how many balls of yarn did she buy?

A 4 balls of yarn

B 5 balls of yarn

C 6 balls of yarn

D 7 balls of yarn

E 8 balls of yarn

5 During the diving competition finals, Philip received the following scores from the five judges.

JUDGE	SCORE
Judge 1	8.325
Judge 2	8.523
Judge 3	8.253
Judge 4	8.235
Judge 5	8.352

Which judge gave Philip the highest score?

A Judge 1

B Judge 2

C Judge 3

D Judge 4

E Judge 5

6 The height of the new building downtown is estimated to be 44.86 metres once completed.

This estimated height is rounded to the nearest hundredth's place.

If the digit in the hundredth's place of the actual height of the building is 5, which of these could be the digit in the thousandth's place?

I. 4
II. 6
III. 8

A II only

B III only

C I and II only

D II and III only

E I, II, and III

7 Robert needs to buy a new computer for work.

The price of the computer he wanted to buy is $1 760, and he can either pay the price in full at the time of buying or pay 6 monthly instalments of $315.

How much money will Robert be able to save by paying for the new computer in full at the time of buying?

A $130

B $145

C $160

D $175

E $190

8 A restaurant bought 6 234 bags of potatoes and 4 128 bags of carrots.

Each bag of potatoes costs $12 and each bag of carrots costs $14.

How much did the restaurant spend on the bags of potatoes and carrots?

A $131 800

B $132 600

C $132 8000

D $133 200

E $134 600

9 A sorcerer can make 128 bottles of potions each day.

Each bottle of potion requires 96 grams of the powdered root of asphodel.

How many kilograms of the powdered root of asphodel does the sorcerer need if he makes potions for 30 days? (1 kilogram = 1 000 grams)

A 36.864 kilograms

B 368.64 kilograms

C 3 686.4 kilograms

D 36 864 kilograms

E 368 640 kilograms

10 Halie bought several pens for 40 cents each.

She paid the cashier $5 and received a change of $1.40.

How many pens did Halie buy?

A 12 pens

B 11 pens

C 10 pens

D 9 pens

E 8 pens

11 A dairy farm collected a total of 840 000 litres of milk during a month with 30 days.

If the same amount of milk were collected from each cow each day and there are 4 000 cows on the dairy farm, how many litres of milk were collected from each cow per day?

A 7 litres

B 21 litres

C 70 litres

D 210 litres

E 28 000 litres

12 George went on a 135-kilometre road trip last Saturday.

His car had 14.4 litres of petrol when he started the road trip.

If he saw that his car had 3.15 litres of petrol left after the road trip, how many kilometres did his car run for each litre of petrol?

A 8 kilometres

B 9 kilometres

C 10 kilometres

D 11 kilometres

E 12 kilometres

13 It took Peter $\frac{1}{3}$ of an hour to paint $1\frac{2}{3}$ metres of a wall.

If the wall was $10\frac{1}{2}$ metres long, how much time did it take Peter to paint the entire wall?

A $1\frac{2}{3}$ hours

B $2\frac{1}{10}$ hours

C $4\frac{1}{2}$ hours

D $5\frac{1}{3}$ hours

E $6\frac{3}{10}$ hours

14 Jenny can make 16 pizzas using $\frac{1}{4}$ of a bottle of pizza sauce.

How many pizzas can Jenny make with one full bottle of pizza sauce?

A 4 pizzas

B 16 pizzas

C 64 pizzas

D 128 pizzas

E 256 pizzas

15 A rectangular tank is 7 metres long, 4 metres wide, and 16 metres deep.

An inlet pipe started filling the empty tank with oil at a rate of 8 cubic metres per minute.

How much time will it take to fill the tank with oil?

A 36 minutes

B 44 minutes

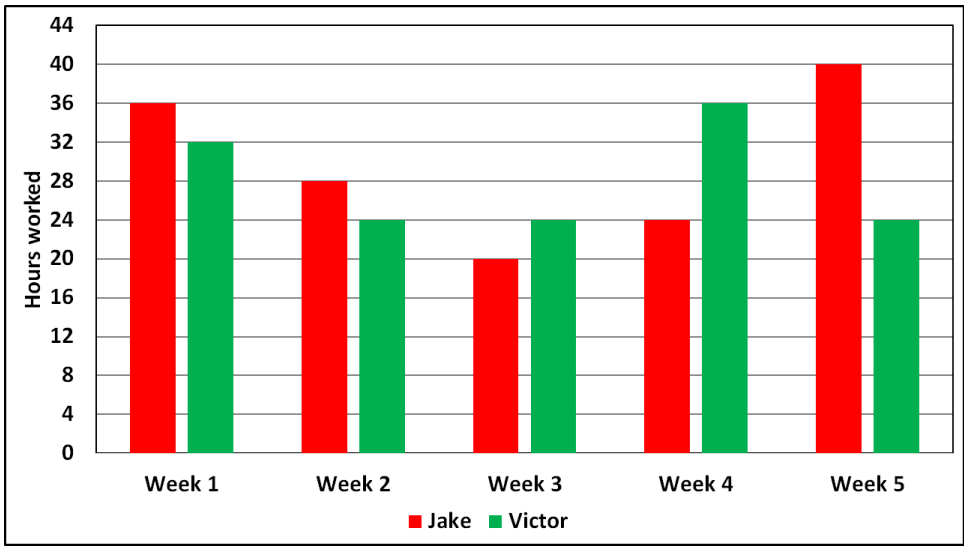
C 56 minutes

D 1 hour 4 minutes

E 1 hour 16 minutes

16 Jake and Victor are both mechanics.

The double bar graph below shows the number of hours Jake and Victor worked each week for the last 5 weeks.



What was the average (arithmetic mean) number of hours Victor worked per week?

A 32 hours

B 28 hours

C 26 hours

D 24 hours

E 22 hours

17 Tom used half a can of white paint to cover $\frac{1}{8}$ of a wall that is 10 metres long and 4 metres high.

At this rate, how many cans of white paint does Tom need to cover the entire wall?

A 2 cans of white paint

B 4 cans of white paint

C 5 cans of white paint

D 6 cans of white paint

E 8 cans of white paint

18 A television network has a policy of showing at most 9 TV ads during each commercial break.

If the television network has a contract to show 175 TV ads, what is the least number of commercial breaks they need?

A 22 commercial breaks

B 21 commercial breaks

C 20 commercial breaks

D 19 commercial breaks

E 18 commercial breaks

19 It takes $1\frac{2}{3}$ cans of orange juice concentrate to make one litre of a mixed fruit punch.

How many litres of mixed fruit punch can Elsa make with $7\frac{1}{2}$ cans of orange juice concentrate?

A $4\frac{1}{2}$ litres

B 5 litres

C $5\frac{1}{2}$ litres

D 6 litres

E $6\frac{1}{2}$ litres

20 Jerry and Tom ordered a large pizza that was divided into equal slices.

Jerry ate $\frac{1}{3}$ of the pizza while Tom ate $\frac{1}{4}$ of the remaining pizza.

If 12 slices of pizza were left, how many slices did Jerry eat?

A 15 slices

B 12 slices

C 9 slices

D 8 slices

E 4 slices

21 In a group of ten students, the average (arithmetic mean) age of the students in the group is 13 years old.

If the average age of nine of the students in the group is 12 years old, what is the age of the tenth student in the group?

A 12 years old

B 13 years old

C 18 years old

D 20 years old

E 22 years old

22 Emma's mother gave her some money to spend on some school supplies.

She spent $\frac{1}{4}$ of the money to buy a notebook.

Then, she bought a filing folder and a pack of art supplies, which each cost $\frac{1}{3}$ of the remaining money.

She was left with $23.10.

How much money did Emma's mother give her?

A $277.20

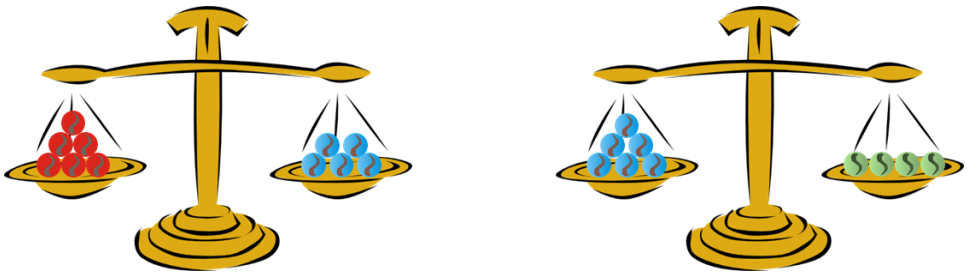
B $162.20

C $92.40

D $87.00

E $69.30

23 In the figure below, all the red marbles have the same mass, all the blue marbles have the same mass, and all the green marbles have the same mass.



If the two scales above are both balanced, how many red marbles are needed to balance this scale?

A 5 red marbles

B 6 red marbles

C 8 red marbles

D 9 red marbles

E 12 red marbles

24 A group of 20 friends decided to equally share the cost of renting a cabin for the weekend.

However, 4 of the friends decided not to join, and thus, the remaining friends each had to pay $45 more.

How much did it cost to rent the cabin?

A $2 400

B $2 600

C $3 200

D $3 600

E $4 000

25 Jean is **y** years old, which is three times as old as Robert and half as old as Bernie.

In terms of **y**, what is the sum of the ages of Jean, Robert, and Bernie?

A $\frac{3y}{2}$

B $\frac{5y}{2}$

C $\frac{7y}{3}$

D 3**y**

E $\frac{10y}{3}$

26 The price of a hard-bound copy of a book is $5 greater than the price of a paperback copy of the same book.

If the price of the hard-bound copy increases by $10, the new price of the hard-bound copy will be twice the price of the paperback copy.

What is the price of the paperback copy of the book?

A $10.00

B $15.00

C $20.00

D $25.00

E $30.00

27 In a group of 300 people, the number of right-handed people is equal to twice the number of left-handed people.

What is the greatest possible number of left-handed people in the group?

A 97

B 98

C 99

D 100

E 101

28 A certain store only sells 20-cent stamps and 40-cent stamps.

If John bought 10 stamps from the store for $3.40, how many 40-cent stamps did he buy?

A 3

B 4

C 5

D 6

E 7

29 Six friends were sharing equally the cost of a video game worth $300.

When some of the friends decide not to contribute, the remaining friends will split evenly the cost of the video game.

In terms of **x**, how much will each of the remaining friends pay if **x** of the friends decide not to contribute?

A $\frac{300}{x}$

B $\frac{50}{x}$

C $\frac{300}{(x-6)}$

D $\frac{300}{(6-x)}$

E $\frac{50}{(x-6)}$

30 A box contains red and blue tokens only.

The current number of red tokens in the box is equal to the current number of blue tokens.

If 15 additional red tokens are added to the box, the percentage of blue tokens will be 40 percent.

What is the total number of tokens currently in the box?

A 30 tokens

B 40 tokens

C 60 tokens

D 90 tokens

E 120 tokens

31 Jenny bought a box of saltwater taffies.

She ate $\frac{2}{5}$ of the saltwater taffies yesterday and ate $\frac{3}{4}$ of the remaining saltwater taffies today.

If she had 18 saltwater taffies left, how many saltwater taffies were in the box?

A 120 saltwater taffies

B 150 saltwater taffies

C 155 saltwater taffies

D 160 saltwater taffies

E 90 saltwater taffies

32 The fare for a taxi ride consists of a standard flag-down fee plus a per kilometre charge.

If Amy pays $29 for a 10-kilometre ride and Bob pays $44 for a 16-kilometre ride, how much does David need to pay if he took a 13-kilometre ride?

A $36.50

B $35

C $34.50

D $30

E $45

33 Sheila is 7 years younger than Mona, and Mona is 5 years older than Diane.

If Diane is 28 years old, how old is Sheila?

A 26 years old

B 30 years old

C 32 years old

D 35 years old

E 22 years old

34 Robbie and Victor both work as waiters at the local pub.

Robbie earns $12 an hour and Victor earns $6 an hour.

If the two of them worked the same number of hours yesterday, how many hours did each of them work if the two of them earned a total of $108?

A 10 hours

B 9 hours

C 8 hours

D 7 hours

E 6 hours

35 During a certain month, an apothecary shop sold $630 worth of candles.

If each candle sold cost 18 cents, how many candles did the apothecary shop sell?

A 4 000 candles

B 3 500 candles

C 3 000 candles

D 2 900 candles

E 2 500 candles