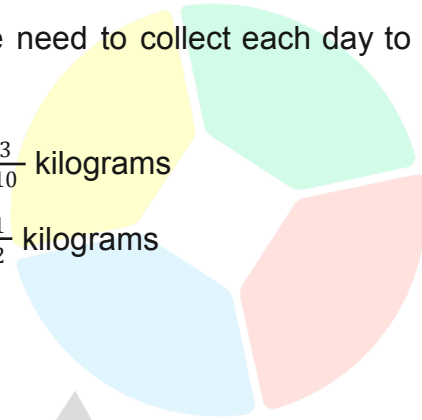


- 1 Mickey Mouse wanted to collect 15 kilograms of old newspapers in 10 days for recycling.

How many kilograms of newspapers does he need to collect each day to meet his goal?

- A $1\frac{1}{2}$ kilograms
B $1\frac{9}{10}$ kilograms
C $2\frac{1}{5}$ kilograms
D $2\frac{3}{10}$ kilograms
E $2\frac{1}{2}$ kilograms



- 2 Mimi has a piece of ribbon one-third of a metre long.

If she cuts the ribbon into two equal pieces, what is the length of each piece?

- A $\frac{5}{6}$ of a metre
B $\frac{2}{3}$ of a metre
C $\frac{1}{2}$ of a metre
D $\frac{1}{3}$ of a metre
E $\frac{1}{6}$ of a metre

- 3 Jessica bought $3\frac{1}{2}$ kilograms of pork for \$12.20 per kilogram.

How much did Jessica pay for the pork?

- A \$44.30
B \$42.60
C \$42.70
D \$40.50
E \$36.50

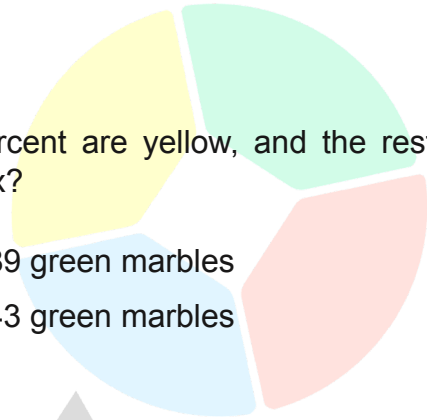
- 4 If 3 kilograms of apples cost \$8.40, how much do 8 kilograms of apples cost at this rate?

- A \$20.80
B \$22.40
C \$24.00
D \$36.80
E \$64.40

- 5 A box contains 540 marbles.

If 20 percent of the marbles are red, 45 percent are yellow, and the rest are green, how many green marbles are in the box?

- A 54 green marbles
B 108 green marbles
C 166 green marbles
D 189 green marbles
E 243 green marbles



- 6 If Cynthia can make 48 widgets in an hour, how many widgets can she make in $\frac{3}{4}$ of an hour at the same average rate?

- A 30 widgets
B 32 widgets
C 36 widgets
D 40 widgets
E 42 widgets

- 7 One dose of the power potion is made up of $\frac{1}{8}$ of a millilitre of Chemical X and $\frac{3}{4}$ of a millilitre of Chemical Y.

How many doses are there in a 35-millilitre vial of the power potion?

- A 35 doses
B 40 doses
C 45 doses
D 50 doses
E 60 doses

- 8 A restaurant had 12 days to use 30 cans of tomato sauce before it turned bad.

How many cans of tomato sauce should the restaurant use each day?

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

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

- 9 Five metal beams have a combined mass of $1\frac{1}{2}$ tonnes.

If each beam has the same mass, what is the mass of one beam?

- A 0.3 tonnes
B 0.4 tonnes
C 0.5 tonnes
D 0.6 tonnes
E 0.8 tonnes

- 10 An old dirt road was originally 3.8 metres wide.

After renovations, the dirt road was 2.5 times as wide.

What is the width of the dirt road after renovations?

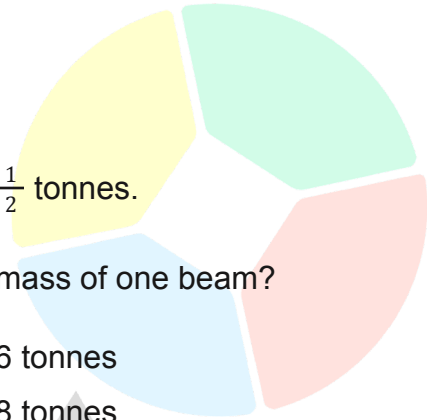
- A 5.3 metres
B 6.3 metres
C 9.5 metres
D 10.2 metres
E 10.8 metres

- 11 Dexter stacked 9 books on top of each other.

If each book is $5\frac{3}{10}$ centimetres thick, how tall was the stack of books?

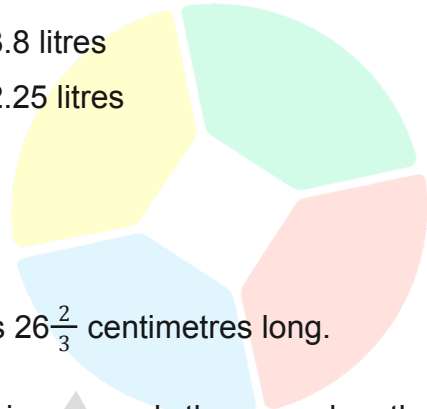
- A $48\frac{9}{10}$ centimetres
B $47\frac{7}{10}$ centimetres
C $46\frac{1}{2}$ centimetres
D $45\frac{3}{10}$ centimetres
E $44\frac{1}{10}$ centimetres

- 12 Angela used 3.45 litres of laundry detergent for each batch of clothes.



If she needs to wash 4 batches of clothes, how many litres of laundry detergent does she need?

- A 14.85 litres
- B 14.6 litres
- C 14.35 litres
- D 13.8 litres
- E 12.25 litres



13 Kermit the Frog has a subway sandwich that is $26\frac{2}{3}$ centimetres long.

If he wanted to cut the sandwich into three pieces, each the same length, how long would each piece be?

- A $8\frac{5}{9}$ centimetres
- B $8\frac{8}{9}$ centimetres
- C $9\frac{1}{6}$ centimetres
- D $9\frac{1}{3}$ centimetres
- E $9\frac{8}{9}$ centimetres

14 Mrs. Norris bought 4 bags of lemons.

How many glasses of lemon can she make if each glass takes $\frac{1}{4}$ of a bag of lemons?

- A 1 glass
- B 8 glasses
- C 12 glasses
- D 16 glasses
- E 24 glasses

15 An ice cream shop puts 8.25 millilitres of syrup for every scoop of ice cream.

How many millilitres of syrup does the ice cream shop need to put in if you order 7 scoops?

- A 57.75 millilitres
- B 58.50 millilitres
- D 60.75 millilitres
- E 62.25 millilitres

C 60.25 millilitres

- 16 If a pack of safety pins has a mass of $20\frac{3}{4}$ grams, what would be the combined mass of $3\frac{1}{2}$ packs of safety pins?

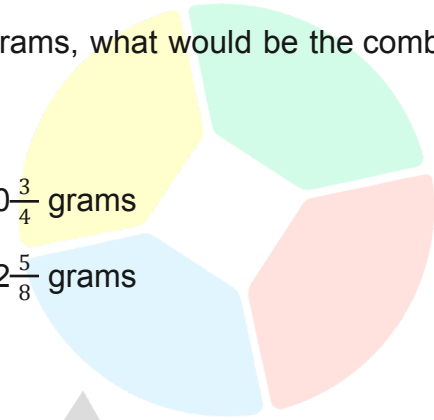
A $60\frac{3}{8}$ grams

B $64\frac{1}{4}$ grams

C $68\frac{1}{2}$ grams

D $70\frac{3}{4}$ grams

E $72\frac{5}{8}$ grams



- 17 A carpenter has a piece of lumber 28.8 metres long.

If the carpenter cuts the lumber into 6 equal pieces, what is the length of each piece?

A 4.4 metres

B 4.8 metres

C 5.2 metres

D 5.4 metres

E 5.6 metres

- 18 Bert and Ernie were collecting soda cans for recycling.

Bert collected four times as many bags as Ernie.

How many bags of soda cans did Ernie collect if Bert collected $4\frac{1}{3}$ bags?

A $1\frac{1}{12}$ bags

B $1\frac{2}{3}$ bags

C $17\frac{1}{3}$ bags

D $17\frac{1}{2}$ bags

E $17\frac{2}{3}$ bags

- 19 The decimal 2.5 is how many times greater than the decimal 0.025?

A 100 000

D 100

B 10 000

E 10

C 1 000

- 20 If one-fourth of the water in the kettle evaporates every 10 minutes, what fraction of the original amount of water in the kettle is left after half an hour?

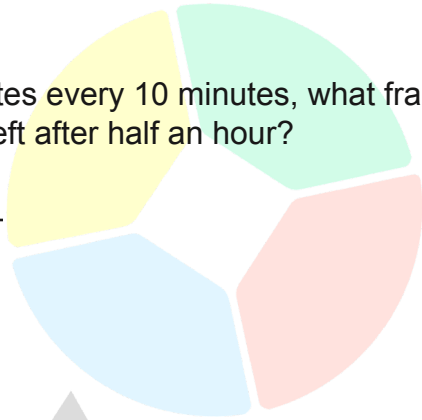
A $\frac{1}{16}$

D $\frac{9}{16}$

B $\frac{1}{8}$

E $\frac{3}{4}$

C $\frac{27}{64}$



- 21 A relay race team of 8 members needs to run a total of 70 kilometres.

If each team member runs the same distance, how far will each member run?

A $8\frac{7}{8}$ kilometres

D $8\frac{1}{4}$ kilometres

B $8\frac{3}{4}$ kilometres

E $7\frac{3}{4}$ kilometres

C $8\frac{1}{2}$ kilometres

- 22 George was stranded on an island for 9 days with just a pack of beef jerky.

If the pack contained half a kilogram of beef jerky and George ate the same amount each day, how much beef jerky did he eat each day?

A $\frac{1}{18}$ of a kilogram

D $\frac{2}{9}$ of a kilogram

B $\frac{1}{9}$ of a kilogram

E $\frac{1}{4}$ of a kilogram

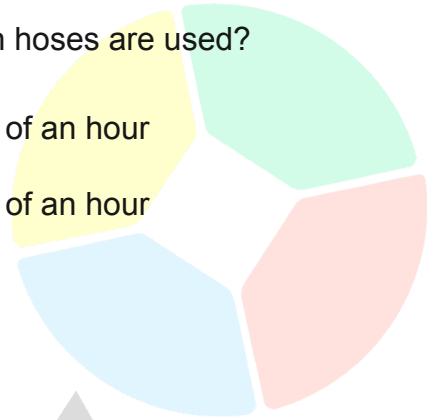
C $\frac{1}{6}$ of a kilogram

- 23** The large hose can fill a water tank in one hour, while the smaller hose can fill the same tank in two hours.

How long will it take to fill the water tank if both hoses are used?

- A** $\frac{1}{3}$ of an hour
B $\frac{2}{3}$ of an hour
C $\frac{3}{4}$ of an hour

- D** $\frac{4}{5}$ of an hour
E $\frac{5}{6}$ of an hour



- 24** Professor Utonium had a bag of mini-mints.

He gave $\frac{1}{3}$ of the mini-mints to Bubbles and $\frac{2}{3}$ of the remaining mini-mints to Buttercup.

Then, he gave $\frac{3}{5}$ of what was left to Blossom.

If there were 8 mini-mints left in the bag, what was the total number of mini-mints in the bag at the start?

- A** 18 mini-mints
B 36 mini-mints
C 45 mini-mints

- D** 84 mini-mints
E 90 mini-mints

- 25** At the comic convention, $\frac{1}{4}$ of the attendees own less than 10 comic books and $\frac{2}{5}$ of all attendees own more than 30 comic books.

What fraction of the attendees own between 10 and 30 comic books?

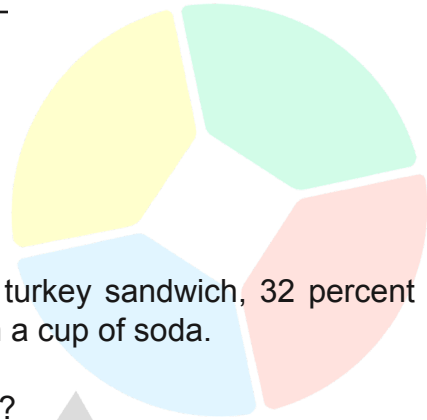
A $\frac{3}{20}$

D $\frac{7}{20}$

B $\frac{1}{5}$

E $\frac{3}{5}$

C $\frac{1}{4}$



- 26 Angela spent 54 percent of her money on a turkey sandwich, 32 percent on a chocolate sundae, and the remaining \$9.24 on a cup of soda.

How much money did Angela have at the start?

A \$64

D \$70

B \$66

E \$74

C \$68

- 27 Half of the tokens in a box were red, one-third of the remaining tokens were blue, and the remaining 160 tokens were green.

What fraction of the tokens in the box was blue?

A $\frac{1}{12}$

D $\frac{1}{3}$

B $\frac{1}{6}$

E $\frac{1}{2}$

C $\frac{1}{4}$

- 28 Captain Jack Sparrow found a treasure chest containing precious gems.

One-third of the gems were diamonds, half of the remaining gems were rubies, and the remaining gems were sapphires.

What fraction of the gems were sapphires?

A $\frac{1}{12}$

B $\frac{1}{8}$

C $\frac{1}{4}$

D $\frac{1}{3}$

E It cannot be determined.

29 $\frac{3}{20}$ is what percent of $\frac{1}{2}$?

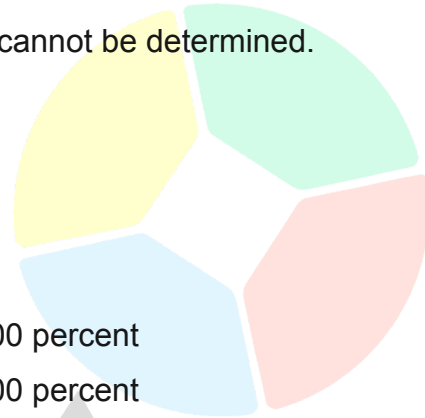
A 30 percent

B 60 percent

C 80 percent

D 300 percent

E 600 percent



30 What fraction of $\frac{3}{8}$ is $\frac{1}{12}$?

A $\frac{1}{3}$

B $\frac{1}{4}$

C $\frac{1}{8}$

D $\frac{2}{9}$

E $\frac{1}{9}$

31 Elsa spends $\frac{5}{8}$ of her weekly earnings on food and $\frac{1}{3}$ of the remainder to pay the bills.

How much is Elsa's weekly earnings if she saves the remaining \$80?

A \$320

B \$384

C \$432

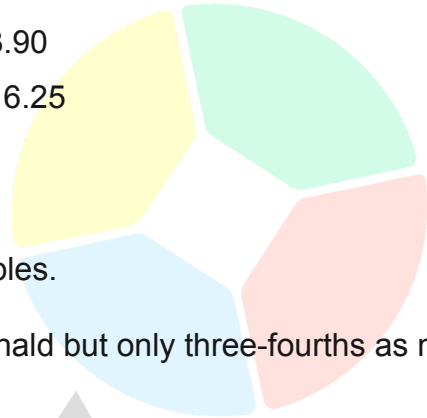
D \$480

E \$512

32 Big Bird's long-distance plan charges \$1.25 for the first minute and 15 cents for each additional minute after that.

How much does Big Bird have to pay for a long-distance call that lasted 13 minutes?

- A \$1.95
- B \$3.05
- C \$3.20
- D \$3.90
- E \$16.25



- 33 Alice, Carl, and Donald have a total of 72 marbles.

Alice has three times as many marbles as Donald but only three-fourths as many marbles as Carl.

How many more marbles does Carl have than Donald?

- A 9 marbles
- B 18 marbles
- C 21 marbles
- D 27 marbles
- E 36 marbles

- 34 One-fourth of all the red apples and $\frac{2}{3}$ of all the green apples in the basket were already bad.

If there were $\frac{2}{3}$ as many red apples as green apples in the basket, what fraction of the apples in the basket were not bad?

- A $\frac{1}{3}$
- B $\frac{4}{9}$
- C $\frac{1}{2}$
- D $\frac{2}{3}$
- E $\frac{5}{6}$

- 35 A candy store has two display cabinets.

The first cabinet has $\frac{2}{3}$ as many shelves as the second cabinet, and the first cabinet has $\frac{5}{6}$ as many bags of candies per shelf as the second cabinet.

What fraction of the total bags of candies on display are on the second cabinet?

- A $\frac{1}{4}$
- D $\frac{9}{14}$

B $\frac{5}{14}$

E $\frac{5}{6}$

C $\frac{5}{9}$

- 36** A dressmaker cuts a piece of fabric 17 metres long into three pieces.

If the second piece is 2.2 metres shorter than the first piece and the third piece is 3 metres longer than the first piece, what is the length of the first piece?

A 3.2 metres

D 6.2 metres

B 3.8 metres

E 8.4 metres

C 5.4 metres

- 37** A fruit vendor bought a basket of apples, $\frac{1}{4}$ of which were green apples.

If the vendor sold $\frac{2}{3}$ of the apples, including $\frac{4}{5}$ of the green apples, what fraction of the remaining apples were green?

A $\frac{1}{60}$

D $\frac{3}{5}$

B $\frac{2}{15}$

E $\frac{3}{4}$

C $\frac{3}{20}$

- 38** Barbie went to the mall and spent $\frac{1}{4}$ of her money on clothes and $\frac{2}{3}$ of the remainder on bags.

If she had \$1 200 left, how much money did she have at the start?

A \$2 400

D \$4 800

B \$3 600

E \$6 000

C \$4 000

- 39 In Steve Xu's selective class, $\frac{5}{12}$ of all the students are girls and $\frac{1}{4}$ of all the students are girls who can speak Italian.

What fraction of the girls in the class can speak Italian?

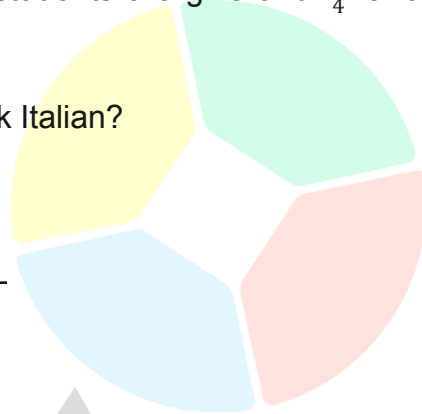
A $\frac{5}{48}$

B $\frac{5}{12}$

C $\frac{2}{5}$

D $\frac{3}{5}$

E $\frac{7}{12}$



- 40 A rectangle has a perimeter of 26 centimetres.

If the width of the rectangle is $\frac{4}{9}$ its length, what is the area of the rectangle?

A 24 square centimetres

B 36 square centimetres

C 40 square centimetres

D 48 square centimetres

E 56 square centimetres

Scholar