

- 1 Liam baked 50 cupcakes for the school's bake sale.

If he sold 35 of the cupcakes during the sale, what fraction of the cupcakes was not sold?

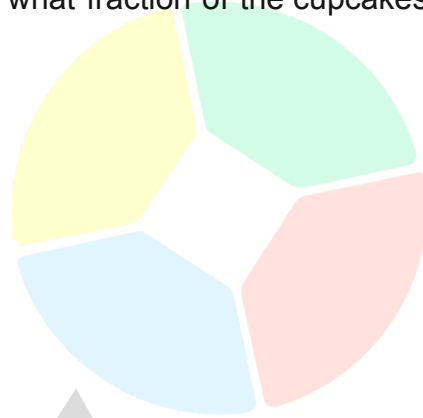
A  $\frac{1}{4}$

B  $\frac{3}{10}$

C  $\frac{1}{3}$

D  $\frac{2}{5}$

E  $\frac{1}{2}$



- 2 Phineas has 20 stickers.

If he gave  $\frac{2}{5}$  of the stickers to Ferb, how many stickers did he have left?

A 16 stickers

B 15 stickers

C 14 stickers

D 12 stickers

E 10 stickers

- 3 If Alicia has 40 pieces of candy and Minerva has 25 percent more pieces than Alicia, how many pieces of candy does Minerva have?

A 50 pieces

B 55 pieces

C 60 pieces

D 65 pieces

E 70 pieces

- 4 Mickey Mouse has 80 screwdrivers, and Goofy has 25 percent more screwdrivers than Mickey Mouse.

If Goofy gives 15 percent of his screwdrivers to Mickey Mouse, how many more screwdrivers will Mickey Mouse have than Goofy?

A 5 screwdrivers

B 10 screwdrivers

C 15 screwdrivers

D 20 screwdrivers

E 25 screwdrivers

- 5 There are 40 students in Steve Xu's selective class.

Twenty-five percent of the students were Americans, 15 percent were Asian, and the remaining were Australians.

Sixty percent of the students in the class wore reading glasses, and 75 percent of the Australian students wore reading glasses.

What percent of the students wearing reading glasses were Australians?

- A 60 percent  
B 65 percent  
C 75 percent  
D 80 percent  
E 85 percent

- 6 Cinderella has \$24.

How much did each chocolate bar cost if she spent 45 percent of her money to buy four chocolate bars?

- A \$2.40  
B \$2.50  
C \$2.60  
D \$2.70  
E \$2.80

- 7 The numbers in each block represent that block's horizontal length in centimetres.



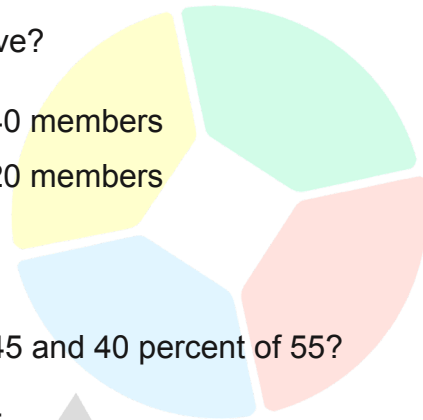
What is the horizontal length of the orange block?

- A 15 centimetres  
B 18 centimetres  
C 20 centimetres  
D 22 centimetres  
E 24 centimetres

- 8 In the Drama Club, 80 percent of the members were female, and 40 members were male.

How many members does the Drama Club have?

- |                      |                      |
|----------------------|----------------------|
| <b>A</b> 200 members | <b>D</b> 140 members |
| <b>B</b> 160 members | <b>E</b> 120 members |
| <b>C</b> 150 members |                      |



- 9 What is the difference between 60 percent of 45 and 40 percent of 55?

- |             |             |
|-------------|-------------|
| <b>A</b> 2  | <b>D</b> 15 |
| <b>B</b> 5  | <b>E</b> 20 |
| <b>C</b> 10 |             |

- 10 If 6 kilograms of potatoes cost \$8, what is the cost of 9 kilograms of potatoes?

- |               |               |
|---------------|---------------|
| <b>A</b> \$10 | <b>D</b> \$14 |
| <b>B</b> \$11 | <b>E</b> \$15 |
| <b>C</b> \$12 |               |

- 11 Last year, Daphne read a total of 70 books.

If Velma read 20 percent more books last year than Daphne, how many books did Velma read last year?

- |                   |                   |
|-------------------|-------------------|
| <b>A</b> 96 books | <b>D</b> 84 books |
| <b>B</b> 92 books | <b>E</b> 80 books |
| <b>C</b> 90 books |                   |

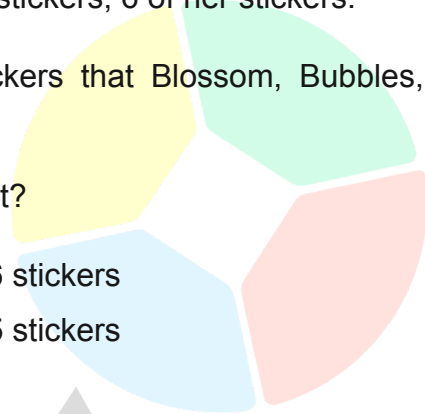
- 12** Blossom and Bubbles shared some stickers in a ratio of 7:3, respectively.

Blossom gave Buttercup, who did not get any stickers, 6 of her stickers.

As a result, the ratio of the number of stickers that Blossom, Bubbles, and Buttercup got was 5:3:2, respectively.

How many stickers did Blossom get at the start?

- A** 21 stickers                      **D** 16 stickers  
**B** 20 stickers                      **E** 15 stickers  
**C** 18 stickers



- 13** Ed, Edd, and Eddy shared 72 sports cards in a ratio of 3:1:4, respectively.

How many more sports cards did Eddy get than Edd?

- A** 9 sports cards                      **D** 36 sports cards  
**B** 18 sports cards                      **E** 45 sports cards  
**C** 27 sports cards

- 14** Of the 42 guests at Barbie's birthday party, 12 were boys, and the rest were girls.

What is the ratio of the number of girls to the number of boys at Barbie's birthday party?

- A** 2 to 5                      **D** 5 to 2  
**B** 2 to 7                      **E** 7 to 2  
**C** 3 to 5

- 15** If five strawberries cost \$1.20, how many strawberries can you buy for \$7.20?

- A** 35 strawberries                      **D** 24 strawberries  
**B** 30 strawberries                      **E** 20 strawberries  
**C** 25 strawberries

- 16** Bugs Bunny has a rectangular carrot garden that has a perimeter of 18 metres.

If the length of the garden is 5 metres longer than its width, what is the area of Bugs Bunny's carrot garden?

- |                           |                           |
|---------------------------|---------------------------|
| <b>A</b> 14 square metres | <b>D</b> 21 square metres |
| <b>B</b> 18 square metres | <b>E</b> 24 square metres |
| <b>C</b> 20 square metres |                           |

- 17** If the Flash ran 384 kilometres in 6 hours, how far can he run in 4 hours at the same average speed?

- |                         |                         |
|-------------------------|-------------------------|
| <b>A</b> 238 kilometres | <b>D</b> 262 kilometres |
| <b>B</b> 244 kilometres | <b>E</b> 270 kilometres |
| <b>C</b> 256 kilometres |                         |

- 18** A wooden board has a volume of 1 500 cubic centimetres.

If a small block measuring 4 centimetres by 3 centimetres by 5 centimetres is cut away from the board, what is the volume of the remaining wooden board?

- |                                  |                                  |
|----------------------------------|----------------------------------|
| <b>A</b> 1 320 cubic centimetres | <b>D</b> 1 380 cubic centimetres |
| <b>B</b> 1 340 cubic centimetres | <b>E</b> 1 440 cubic centimetres |
| <b>C</b> 1 360 cubic centimetres |                                  |

- 19** A rectangular aquarium 2 metres long and 2 metres wide is filled with water to a depth of 0.4 metres.

When a piece of rock is placed inside the aquarium, the water level rises to 0.6 metres.

What is the volume of the piece of rock?

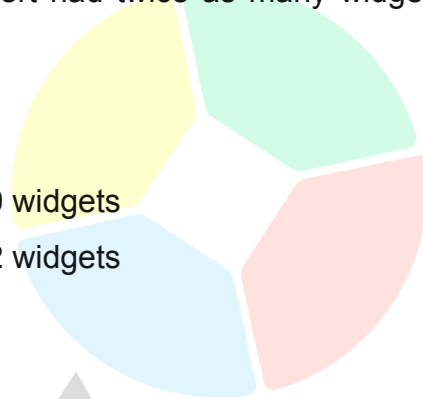
- |                           |                                   |
|---------------------------|-----------------------------------|
| <b>A</b> 0.8 cubic metres | <b>D</b> 1.5 cubic metres         |
| <b>B</b> 1 cubic metre    | <b>E</b> It cannot be determined. |
| <b>C</b> 1.2 cubic metres |                                   |

- 20** Bert and Ernie had 60 widgets together.

After Ernie gave  $\frac{1}{6}$  of his widgets to Bert, Bert had twice as many widgets as Ernie.

How many widgets did Bert have at the start?

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



- 21** A rectangular container 22 centimetres long and 15 centimetres wide is partially filled with water up to a depth of 7 centimetres.

When another 660 cubic centimetres of water is added to the container, how deep will the water in the container be?

- A** 22 centimetres                      **D** 9 centimetres  
**B** 18 centimetres                      **E** It cannot be determined.  
**C** 15 centimetres

- 22** A rectangular carpet has an area of 16 square metres.

If the carpet is 10 metres long, how wide is the carpet?

- A** 1.6 metres                      **D** 3.2 metres  
**B** 2 metres                      **E** 16 metres  
**C** 2.4 metres

- 23** A copper wire 12.948 metres long is cut into four pieces.

If the length of each of the three pieces is 3.085 metres, what is the length of the fourth piece?

- A** 3.085 metres                      **D** 3.458 metres  
**B** 3.225 metres                      **E** 3.693 metres  
**C** 3.367 metres

- 24** Dexter and DeeDee took the same IQ test where DeeDee's score was  $\frac{4}{5}$  of Dexter's score.

If DeeDee got a score of 76 on the test, what was the sum of the scores of Dexter and DeeDee on the test?

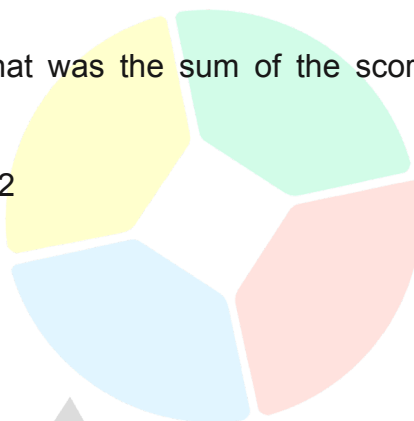
**A** 192

**B** 171

**C** 169

**D** 152

**E** 96



- 25** Cookie Monster baked a cake.

He ate  $\frac{1}{6}$  of the cake and cut the rest of the cake into 15 equal slices.

If he gave 6 slices to Kermit the Frog, what fraction of the original cake was left?

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

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

**C**  $\frac{1}{3}$

**D**  $\frac{1}{2}$

**E**  $\frac{2}{3}$

- 26** Alicia had \$45.

If she spent  $\frac{3}{5}$  of her money on a bag, how much money did she have left?

**A** \$18

**B** \$20

**C** \$21

**D** \$24

**E** \$25

- 27** A vendor bought a box of lightbulbs.

After selling  $\frac{2}{3}$  of the lightbulbs in the box, she noticed that  $\frac{1}{5}$  of the remaining lightbulbs were defective, while the other 16 were not defective.

The number of remaining lightbulbs that were not defective is what fraction of the total number of lightbulbs in the box?

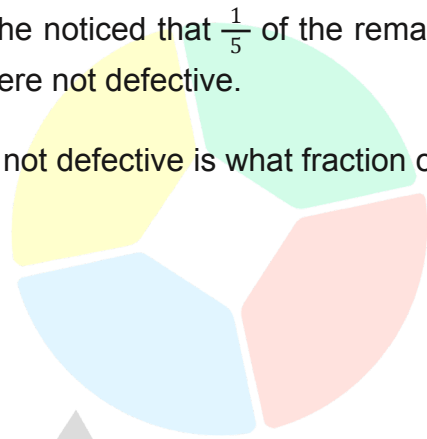
**A**  $\frac{1}{5}$

**B**  $\frac{4}{15}$

**C**  $\frac{3}{10}$

**D**  $\frac{2}{5}$

**E**  $\frac{1}{2}$



- 28** Belle made a trail mix snack by combining 3.6 kilograms of nuts and 0.75 kilograms of dried fruits.

She then packed the snack into 5 equal containers.

How many grams of trail mix snacks did she pack in each container?

**A** 50 grams

**B** 87 grams

**C** 365 grams

**D** 500 grams

**E** 870 grams

- 29** Five identical iron balls have a combined mass of 900 grams.

If the combined mass of the five identical iron balls is half the combined mass of five identical copper balls, what is the combined mass of two such copper balls?

**A** 600 grams

**B** 640 grams

**C** 720 grams

**D** 780 grams

**E** 840 grams

- 30** A dressmaker had 23 metres of fabric to make 7 skirts of the same size.

If she had 2 metres of fabric left after making the skirts, how many metres of fabric did she use to make each skirt?

- |                     |                   |
|---------------------|-------------------|
| <b>A</b> 2 metres   | <b>D</b> 4 metres |
| <b>B</b> 2.5 metres | <b>E</b> 5 metres |
| <b>C</b> 3 metres   |                   |

- 31** Patrick is 3 kilograms heavier than Johnny, and Johnny is 2 kilograms less heavy than Monica.

How much heavier is Patrick than Monica?

- |                      |                      |
|----------------------|----------------------|
| <b>A</b> 1 kilogram  | <b>D</b> 4 kilograms |
| <b>B</b> 2 kilograms | <b>E</b> 5 kilograms |
| <b>C</b> 3 kilograms |                      |

- 32** A librarian received a donation of 72 books.

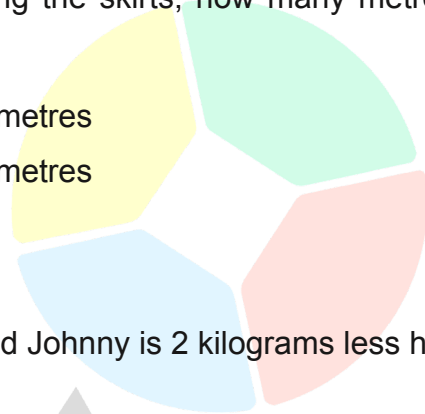
She then divided the books into 5 equal piles, where she had 2 books left.

How many books were in each pile?

- |                   |                   |
|-------------------|-------------------|
| <b>A</b> 10 books | <b>D</b> 15 books |
| <b>B</b> 12 books | <b>E</b> 16 books |
| <b>C</b> 14 books |                   |

- 33** If 8 watches cost \$240, how much do 5 watches cost?

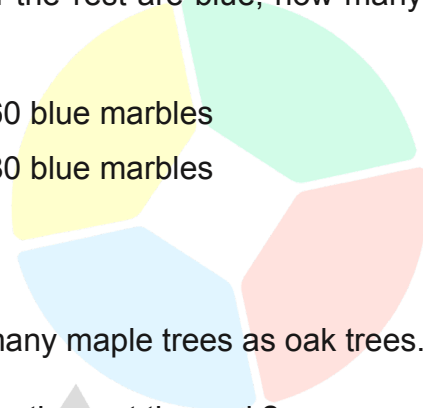
- |                |                |
|----------------|----------------|
| <b>A</b> \$120 | <b>D</b> \$140 |
| <b>B</b> \$125 | <b>E</b> \$150 |
| <b>C</b> \$130 |                |



- 34** Marvin has 12 boxes of marbles, each containing 80 marbles.

If 50 of the marbles in each box are red and the rest are blue, how many blue marbles does Marvin have?

- A** 300 blue marbles  
**B** 320 blue marbles  
**C** 350 blue marbles  
**D** 360 blue marbles  
**E** 380 blue marbles



- 35** The park has 32 oak trees and four times as many maple trees as oak trees.

How many more maple trees than oak trees are there at the park?

- A** 128  
**B** 96  
**C** 88  
**D** 80  
**E** 72