1 Two rock samples have a combined mass of 266 grams.

If one of the rock samples is 37 times heavier than the other rock sample, what is the mass of the heavier rock sample?

A 7 grams

B 222 grams

C 236 grams

D 259 grams

E 263 grams

2 Bert can wash a car in 2 hours, while Ernie can wash the same car in 3 hours.

How long will it take if the two of them work together to wash the car?

A $\frac{5}{6}$ of an hour

B 1 hour

C $1\frac{1}{5}$ hours

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

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

3 Ed is older than Edd, and Eddy is older than Ed.

Who among them is the oldest?

A Ed

B Edd

C Eddy

D Ed and Edd

E Neither, all 3 are of the same age

4 An accountant made a 15-page report and charged $36.90.

How much did the accountant charge per page if this fee included the $4.50 service charge?

A $2.16

B $2.24

C $2.25

D $2.30

E $2.46

5 Maris owns $\frac{4}{7}$ of the business.

If she decides to sell half of her share in the business, what fraction of the business does she still own after selling her share?

A $\frac{1}{14}$ **D** $\frac{5}{14}$

B $\frac{1}{7}$ **E** $\frac{3}{7}$

C $\frac{2}{7}$

6 Carl, who is 120 centimetres tall, cast a shadow 1 metre long.

If Benny, who is standing next to Carl, is 100 centimetres tall, how long will Benny's shadow be?

A $\frac{4}{5}$ of a metre   **D** $1\frac{1}{5}$ metres

B $\frac{5}{6}$ of a metre   **E** $1\frac{1}{4}$ metres

C 1 metre

7 Anna and Elsa were both picking flowers in the garden.

If Anna picked 8 times as many flowers as Elsa did and Anna picked 56 flowers, how many flowers did the two of them pick together?

A 63 flowers   **D** 448 flowers

B 64 flowers   **E** 512 flowers

C 392 flowers

8 Gandalf the Wizard bought 50 bags of unicorn hair for 1 500 golds.

He then sold 20 bags for 54 golds each and sold the remaining bags for 60 golds each.

How much was Gandalf's profit from the sale? (Profit = Revenue – Expenses)

A 2 880 golds

B 2 420 golds

C 1 960 golds

D 1 380 golds

E 1 200 golds

9 Scooby can ride his bike at 10 kilometres per hour, while Shaggy can drive 7 times that fast in his car.

How long will it take Shaggy to drive 140 kilometres at this speed?

A 2 hours

B 4 hours

C 7 hours

D 10 hours

E 14 hours

10 At the factory, the faster machine takes 5 minutes to complete one order.

After completing one-third of the order, the faster machine stopped working, and the rest of the order was completed by the slower machine, whose rate is $\frac{1}{10}$ the rate of the faster machine.

How many minutes did it take the slower machine to complete the rest of the order?
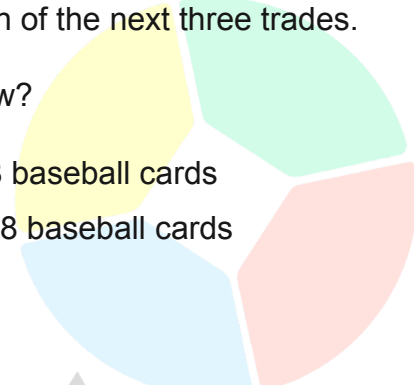
A $\frac{50}{3}$ minutes

B $\frac{80}{3}$ minutes

C 3 minutes

D $\frac{100}{3}$ minutes

E 50 minutes

11 Elmo has 75 baseball cards.

He trades five baseball cards in exchange for two in each of the first five trades and then trades six in exchange for two in each of the next three trades.

How many baseball cards does Elmo have now?

A 40 baseball cards

B 48 baseball cards

C 59 baseball cards

D 68 baseball cards

E 118 baseball cards

12 During the mall sale, Barbie bought a blender for only $157.50 after a $67.50 discount from the regular price.

How many percent was the discount?

A 70 percent

B 60 percent

C 50 percent

D 40 percent

E 30 percent

13 If five more than half of a number is 11, what is the number?

A 8

B 10

C 12

D 18

E 24

14 Yesterday, Tarzan jogged a total of 24 kilometres.

If he jogged twice as far in the afternoon than in the morning, how far did he jog in the morning?

A 8 kilometres

B 9 kilometres

C 10 kilometres

D 12 kilometres

E 16 kilometres

15 The length of a rectangular garden is three times its width.

If the garden's perimeter is 32 metres, what is the length of the garden?

A 4 metres   **D** 16 metres

B 8 metres   **E** 20 metres

C 12 metres

16 If Jack bought five packs of gum for $1.40 per pack and Jill bought 15 packs of the same gum, how much did they pay together for the gums?

A $7   **D** $24

B $14   **E** $28

C $21

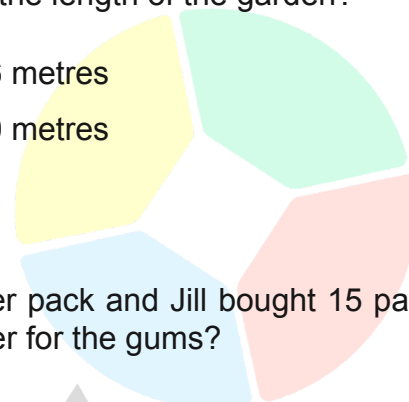**17** There are 36 brown and white goats on Old MacDonald's farm.

If there are 12 more brown goats than white goats on the farm, how many brown goats are there?

A 24 brown goats   **D** 16 brown goats

B 20 brown goats   **E** 12 brown goats

C 18 brown goats

18 Dexter scored 97, 89, 89, 87, and 88 on his Math, Science, History, English, and Literature tests.

What was Dexter's average (arithmetic mean) score on all five tests?

A 95   **D** 90
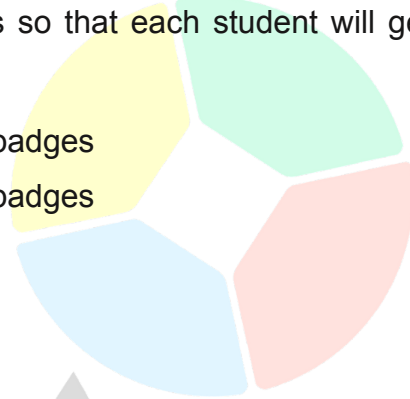
B 94   **E** 88

C 92

19 Miss Robles brought 100 badges for a class activity.

If there are 24 students in her class, what is the greatest possible number of badges she can give to each of her students so that each student will get the same number of badges?

A 1 badge

B 2 badges

C 3 badges

D 4 badges

E 5 badges

20 Scott Lang is 46 years old.

If he is 4 years older than thrice his daughter's age, how old is her daughter?

A 15 years old

B 14 years old

C 13 years old

D 12 years old

E 11 years old

21 Huey's age is one-third of Dewey's age, and Louie is 6 years older than Dewey.

If the sum of their ages equals 55 years, how old is the oldest of the three?

A 7 years old

B 15 years old

C 21 years old

D 27 years old

E 28 years old

22 The difference between the two numbers is 70.

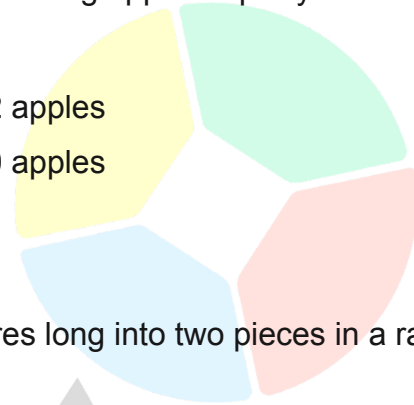If the bigger number is six times the smaller number, what is the bigger number?

A 85

B 80

C 84

D 90

E 92

23 During the last harvest season, a farmer harvested 4 392 apples.

If he kept 144 for his family and boxed the remaining apples equally in 36 boxes, how many apples did he put in each box?

A 118 apples

B 116 apples

C 108 apples

D 32 apples

E 30 apples

24 A carpenter cuts a piece of bamboo 1.36 metres long into two pieces in a ratio of 2:3.

What is the length of the longer piece?

A 27.2 centimetres

B 54.4 centimetres

C 66.4 centimetres

D 81.6 centimetres

E 92.2 centimetres

25 Alvin is eight years older than Simon, and Theodore is two years younger than Simon.

If the sum of their ages equals 60 years, how old is the youngest of the three?

A 16 years old

B 18 years old

C 20 years old

D 24 years old

E 26 years old

26 Donald Duck has two ropes of lengths 40 metres and 52 metres.

He wants to cut the two ropes into pieces of equal length.

What is the greatest possible length of each piece so there will be no leftover rope?

A 3 metres

B 4 metres

C 5 metres

D 6 metres

E 8 metres

27 The ages of Jack and Ryan are in a ratio of 3 to 4, respectively.

If Ryan is 5 years older than Jack, how old is Ryan?

A 10 years old
D 18 years old

B 15 years old
E 20 years old

C 16 years old

28 A truck 400 metres long travels at a constant speed of 3 kilometres per hour.

How long will it take the truck to cross a bridge 1.25 kilometres long?

A 25 minutes
D 33 minutes

B 28 minutes
E 36 minutes

C 30 minutes

29 The average daytime temperature in the planet Vagosphere is -332° Celsius, and the average nighttime temperature is -533° Celsius.

What is the difference between the average daytime and average nighttime temperatures in the planet Vagosphere?

A 201° Celsius
D 664° Celsius

B 262° Celsius
E 865° Celsius

C 463° Celsius

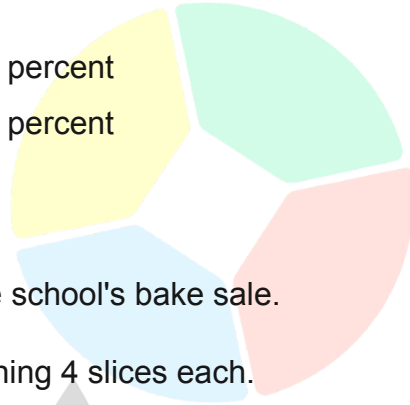**30** There are 30 apples, 50 oranges, 16 melons, and 24 apricots in a fruit stand.

If there are no other fruits in the fruit stand, what fraction of the fruits are apples?

A $\frac{1}{2}$
D $\frac{1}{30}$

B $\frac{1}{3}$
E $\frac{1}{90}$

C $\frac{1}{4}$

31 There are 400 marbles in a jar, 312 of which are red, and the rest are blue.

What fraction of the marbles in the jar are red?

A 31.2 percent

B 36 percent

C 40 percent

D 78 percent

E 88 percent

32 Cinderella baked 326 slices of brownies for the school's bake sale.

She then packed the brownies in boxes containing 4 slices each.

If she packed as many boxes as possible, how many slices of brownies did she have left unpacked?

A 0 slices

B 1 slice

C 2 slices

D 3 slices

E 4 slices

33 Michael has 700 marbles.

He gave away 175 marbles and equally packed the remaining marbles into five boxes.

How many marbles were in each box?

A 35 marbles

B 105 marbles

C 115 marbles

D 130 marbles

E 140 marbles

34 Snow White baked 364 muffins and packed them in boxes containing 8 muffins each.

If she packed as many boxes as possible and sold each box for $5, how much money did Snow White make from the sale?

A $225

D $210

B $220

E $205

C $215

35 Two-ninths of the students in Steve Xu's selective class were boys.

How many girls were there if there were 95 more girls than boys in the class?

A 38 girls

D 152 girls

B 57 girls

E 171 girls

C 133 girls