## Question 1 of 37

Question: 1
My diet requires me to lose 528 grams over 1 year. After 3 months, I've lost 125. How many grams am I overweight by?

Possible Answers
Selected Possible Answer
C -5
( -1
C 4
C 7
C 11

Question: 2
Find the sum of the prime numbers between 35 and 45 .
Possible Answers
Selected Possible Answer
C 80
C 121
C 119
C 137
C 160

Question: 3
How much is $\frac{1}{3}$ of $x$ ?

1. 10 percent of $x$ is 5
2. 5 percent of 2 x is 7.5 .

Possible Answers
Selected Possible Answer

C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
$C$ Together the statements are sufficient
C Each statement is sufficient alone
C Together, the statements are not sufficient

Question: 4

Two rectangles have the same area. One rectange has dimensions 16X28. The second has dimensions 7XW. Find W.

Possible Answers

## Selected Possible Answer

C 16
C 32
C 64
C 14
C 49

Question: 5

Is x greater than 0.2 ?

1. $x$ is greater than $\backslash \operatorname{frac}\{3\}\{33\}$
2. $x$ is less than $\backslash f r a c\{3\}\{11\}$

Possible Answers
Selected Possible Answer
C Statement A is sufficient alone
C Statement B is sufficient alone
$C$ Both statements together are sufficient
$C$ Alone, each statement is sufficient
C Together the statements are still insufficient

Question: 6

What's the value of angle D of parallelogram ABCD ?

1. Angle $B$, the opposite angle, is 60 degrees.
2. The length of side $A D$ is 20 .

## Possible Answers

## Selected

Possible Answer
C Statement 1 is sufficient alone
$C$ Statement 2 is sufficient alone
$C$ Together, the statements are sufficient
$C$ Each statement is sufficient on its own
C Together, the statements are still insufficient

## Question: 7

What's the probability that a random person selected from a group is male?

1. There are 10 males in the group.
2. A quarter of the group are not female.

Possible Answers

## Selected Possible Answer

C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
$C$ Together, the statements are sufficient
C Each statement is sufficient on its own
C Together the statements are insufficient

Question: 8
Find $(\sqrt{7}+\sqrt{7})^{2}-(\sqrt{4}+\sqrt{4})^{2}$.

Possible Answers
Selected Possible Answer
C 8
C 12
C 16
C 24
C 28

Question: 9

The average of 10 numbers is 7.4 , while the average of the other 8 numbers in my set is 6.5. What's the average of the entire set, rounded to one decimal?

Possible Answers
Selected Possible Answer

$$
\bigcirc \quad 6.8
$$

C 6.9
C 7.0
C 7.1
C 7.2

Question: 10

Is a positive?

1. 8 x is greater than 18 x .
2. $x-4$ is negative.

Possible Answers
Selected Possible Answer
C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Together the statements are sufficient
C Each statement is sufficient on its own
C Together the statements are still insufficient

Question: 11
a and b are integers. Is $a+b$ even?

1. $a=b$
$2 a-2 b=0$.
Possible Answers
Selected Possible Answer
C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Together the statements are sufficient

C Each statement is sufficient alone
C Together the statements are still insufficient

## Question: 12

In a circle, I draw 2 radii with a an angle of 120 between them. If I shade the area between the radii (with the angle in the shade), what fraction of the circle is not unshaded?

Possible Answers

## Selected Possible Answer

C $1 / \mathrm{Pi}$
(C $1 / 3$
C $1 / 4 \mathrm{Pi}$
C $1 / 3 \mathrm{Pi}$
( $2 / 3$

Question: 13
$\mathrm{a}, \mathrm{b}$ and c are not zero. What's the value of bc ?

1. $a^{2} b^{2} c^{2}=18 a^{2} b c$
2. $\backslash \operatorname{frac}\{2 a\}\{b\}=\backslash \operatorname{frac}\{108 \mathrm{ac}\}\{6\}$

Possible Answers
Selected Possible Answer
C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Together the statements are sufficient
C Each statement is sufficient on its own
C Together the statements are still insufficient

Question: 14
N is divisible by 5,6 , and 7 . Which of these must N be disivible by as well?
Possible Answers

## Selected Possible Answer

C 27
C 105
C 140
C 165
C 420

## Question: 15

Is triangle ABC isoceles?

1. Angle $B=60$ degrees
2. Angle $\mathrm{C}=60$

Possible Answers

## Selected <br> Possible Answer

$C$ Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Together, both statements are sufficient
C Each statement is sufficient on its own
C Together the statements are still insufficient

Question: 16
Which of the values for C will give a greatest value for A , if $A=555+111 B-222 C$ ?
Possible Answers
Selected Possible Answer
C 2
C $1 / 111$
C 0
C $1 / 222$
C -2

Question: 17

Runner A is twice as fast as Runner B. If runner B takes 10 minutes to run 5 km , how long will it take runner A to run 15 km (in minutes)?

Possible Answers
Selected Possible Answer
C 3.333
C 10
C 15
C 30

Question: 18

On a coordinate grid, does line L pass through (3,3)?

1. Line L passes through $(1,1)$.
2. Line L passes through $(4,4)$.

Possible Answers
Selected Possible Answer
C Statement 1 is sufficient alone
$C$ Together the statements are sufficient
C Together the statements are not sufficient

Question: 19

Are Lines L1 and L2 parallel?.

1. Lines L1 and L2 have different $y$-intercepts
2. Line R is perpendicular to both L1 and L2

Possible Answers
Selected
Possible Answer
C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
$C$ Each statement is sufficient on its own
C Together the statements are not sufficient

My set of distinct integers consists of $3,4,5$, and 6 . If I add the numbers $N$ and 8 to the set and I want to median to stay the same, what must my number N be equal?

Possible Answers

## Selected Possible Answer

C 1
C 4.5
C 7
C $\quad 1$ or 2

Question: 21

Does k equal j ?

1. jk is negative
2. $j+k=0$

## Possible Answers

## Selected Possible Answer

C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Each statement is sufficient alone
C Together the statements are still insufficient

Question: 22

A square has a diagonal of 60 feet (it's big). What's the diameter of the square approximately?

Possible Answers

## Selected Possible Answer

C 80
C 120
C 160
C 170
C 185

## Question: 23

The ratio of snakes to pineapples if 1:4. If there are 6 more snakes and 2 less pineapples, the ratio would be $3: 10$. How many pineapples are there?

## Possible Answers

Selected Possible Answer
C 33
C 64
C 76
C 132

Question: 24
Is $\frac{150}{p}$ an integer?

1. p is less than 8
2. p is a prime number

Possible Answers
Selected Possible Answer
$C$ Statement 1 is sufficient alone
C Statement 2 is sufficient alone
$C$ Together the statements are sufficient
C Each statement is sufficient alone
C Together the statements are still insufficient

Question: 25

In a hockey league there are 10 teams. Each team plays every other team once. If we can play 5 games every week, how many weeks long is one season?

Possible Answers
Selected Possible Answer
C 8
C 9
C 18

Which of the following has value that's closest to 1 ?

## Possible Answers

## Selected Possible Answer

C 1.25
C $\frac{9}{10}$
C $\frac{1}{2}$
C $\left|-\frac{14}{15}\right|$
C $|-1.1|$

## Question: 27

Is A a prime number?

1. A is even
2. Ignoring A, A has no other factors that are even.

Possible Answers
Selected Possible Answer
C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Together the statements are sufficient
$C$ Each statement is sufficient on its own
C Together the statements are still insufficient

Question: 28

A bowl has some goldfish, some codsifh, and some fishfish. How many fish are in the bowl?

1. The probability is choosing a goldfish is $1 / 2$.

There are 5 fishfish in the bowl.
Possible Answers
Selected Possible Answer

C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C The statements are only sufficient together
C Each statement is sufficient alone
C Together the statements are still insufficient

## Question: 29

The ratio between the radius of circle X and the diameter of circle Y is $1: 4$. What's the ratio between the area of circle X and the area of circle Y ?

Possible Answers

## Selected Possible Answer

| $C$ | $1: 16$ |
| :---: | :---: |
| $C$ | $4: 8$ |
| $C$ | $1: 4$ |
| $C$ | $1: 2$ |
| $C$ | $1: 8$ |

Question: 30
A line passes through $(0,5)$ has a slope parallel to $y=x+10$. Which of the following points would the line pass through?

Possible Answers
Selected Possible Answer
C $(-7,-2)$
C $(3,10)$
C $(8,3)$
C $(4,9)$
C $\quad(10,0)$

Find the value of $7 x+22$

1. $x^{2}+5 x-6=0$
2. $x^{2}+12 x+36=0$

## Possible Answers

## Selected Possible Answer

C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C The statements are only sufficient together
C Each statement is sufficient on its own
C Together the statements are still insufficient

## Question: 32

Where is the monkey?

1. The monkey is behind door x , where $7 x-5=9$.
2. The monkey is behind door y , where $2^{y+3}=4^{\frac{5}{2}}$.

Possible Answers
Selected Possible Answer
C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
C Together the statements are sufficient
C Each statement is sufficient alone
C Together the statements are insufficient

## Question: 33

There are 5 monkeys on an island. Each monkey has a boat. Each monkey take his boat and tries to get off the island. If the probability of each boat sinking is $1 / 4$, what is the probability that all monkeys make it safely back except for King Kong who took the S.S. Banana, approximately?

Possible Answers

## Selected Possible Answer

( $1 / 5$
C $81 / 1024$
( $1 / 4$
C $81 / 256$
( $3 / 5$

Question: 34
Find x if $2^{y+3}=4^{\frac{5}{2}}$.
Possible Answers

## Selected Possible Answer

C 7
C 0,7
C $0,-6,7$
C $0,-6$
C $0,3,7$

Question: 35

What's the distance between the school and the library?

1. The school is 4 km from the church
2. The library is 3 km from the Church.

Possible Answers

## Selected

## Possible Answer

$C$ Statement 1 is sufficient on its own
C Statement 2 is sufficient alone
C Together the statements are sufficient
C Each statement is sufficient on its own
C Together the statements are still insufficient

Question: 36

What's the average grade Mark recieved on his report card?

1. $30 \%$ of his grades were 80 and $70 \%$ were 70 .
2. He got 6 grades of 80 .

## Possible Answers

## Selected

## Possible Answer

C Statement 1 is sufficient alone
C Statement 2 is sufficient alone
$C$ The statements are only sufficient together
C Each statement is sufficient on its own
C Together the statements are still insufficient

## Question: 37


#### Abstract

A train leaves London at 5 AM , and a train leaves Paris an hour later. If the two trains pass each other right in the middle of the journey, and the distance between London and Paris is 400 km , and the speed of the London train is $60 \mathrm{~km} / \mathrm{h}$, find the speed of the Paris train.


Possible Answers
Selected Possible Answer
C $\quad 45 \mathrm{~km} / \mathrm{hr}$
C $\quad 56 \mathrm{~km} / \mathrm{hr}$
C $75 \mathrm{~km} / \mathrm{hr}$
C $86 \mathrm{~km} / \mathrm{hr}$
C $90 \mathrm{~km} / \mathrm{hr}$

