

## Question 1 of 37

Question: 1

Together, Dracula and Frankenstein scared 53 people. Dracula scared 19 more people than Frankenstein. How many people did Frankenstein scare?

Possible Answers

**Selected Possible Answer**

- 17
- 22
- 28
- 36
- 41

Question: 2

What is the area of my square?

1. One side of the square is 5
2. The diagonal of the square is approximately 7.07.

Possible Answers

**Selected**

**Possible Answer**

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

Question: 3

A is 5 times bigger than B. B is 2 units larger than 3C. D is 6 units less than C. Find D if A is 70.

Possible Answers

**Selected Possible Answer**

- 17

- 15
- 12
- 6
- 2

Question: 4

Is  $N$  an even number?

1.  $2N$  is even
2.  $2N + 1$  is odd

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b>                   |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone          |
| <input type="radio"/> | Statement 2 is sufficient alone          |
| <input type="radio"/> | Together the statements are sufficient   |
| <input type="radio"/> | Each statement is sufficient alone       |
| <input type="radio"/> | Together the statements are insufficient |

Question: 5

On a hotdog, the ratio of relish to ketchup is 3:4. The ratio of ketchup to mustard is 7:15.

I have 2 teaspoons of relish on my hotdog. How many teaspoons of mustard do I have on it, to the nearest teaspoon?

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b> |
|-----------------------|------------------------|
| <input type="radio"/> | 4                      |
| <input type="radio"/> | 5                      |
| <input type="radio"/> | 6                      |
| <input type="radio"/> | 7                      |
| <input type="radio"/> | 8                      |

Question: 6

My vertical line intersect the x-axis at the midpoint of (4, -6) and (10, 6). Find the equation of my line.

Possible Answers

**Selected Possible Answer**

- $x = 6$
- $x = 7$
- $x = -6$
- $y = 6$
- $y = 7$

Question: 7

Find x

1.  $x^2 + 22x + 121 = 0$
2.  $x + y = 8$

Possible Answers

**Selected**

**Possible Answer**

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

Question: 8

What is the area of my garden?

1. The distance between a point at the edge of my garden and the centre of my garden is 6.
2. The garden is circular.

Possible Answers

**Selected**

**Possible Answer**

- Statement 1 is sufficient alone
- Statement 2 is sufficient alone
- Together the statements are sufficient

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

Question: 9

The probability of me falling asleep in class is 10%. The probability of the teacher arriving late is 40%. What is the probability that I stay awake during the whole class but the teacher arrives late?

Possible Answers

**Selected Possible Answer**

- 54%
- 50%
- 42%
- 36%
- 6%

Question: 10

What's the distance of path A?

1. I can walk through path A and get home in 14 minutes.
2. I can run through path A at 7 m/s and be home in 6 minutes.

Possible Answers

**Selected**

**Possible Answer**

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

Question: 11

The average height of 3 kids is 80 cm. Which kid is the tallest?

1. Kid A is 80 cm tall
2. Kid B is 85 cm tall

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b>                   |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone          |
| <input type="radio"/> | Statement 2 is sufficient alone          |
| <input type="radio"/> | Together the statements are sufficient   |
| <input type="radio"/> | Each statement is sufficient alone       |
| <input type="radio"/> | Together the statements are insufficient |

Question: 12

I mix together 4 mL of solution M, which has 50% water, and 2 mL of solution N that has 40% water. What is the water percentage in the combine solution?

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b> |
|-----------------------|------------------------|
| <input type="radio"/> | 39                     |
| <input type="radio"/> | 43                     |
| <input type="radio"/> | 47                     |
| <input type="radio"/> | 52                     |

Question: 13

- Is  $p$  a prime number?
- $p + 1$  is a prime number.
  - $p - 1$  is a prime number.

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b>                         |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone                |
| <input type="radio"/> | Statement 2 is sufficient alone                |
| <input type="radio"/> | Together the statements are sufficient         |
| <input type="radio"/> | Each statement is sufficient on its own        |
| <input type="radio"/> | Together the statements are still insufficient |

Question: 14

If I take path A it'll take me 20 minutes to walk to school. If I take path B and walk at the same rate, it'll take me 25 minutes. Path B is 40 metres longer than path A. How long is path A?

Possible Answers

**Selected Possible Answer**

- 140
- 160
- 180
- 200
- 220

Question: 15

Find the average of the roots of  $4x^2 - 19x - 30$ .

Possible Answers

**Selected Possible Answer**

- 1
- 14/5
- 3
- 19/8
- 23/4

Question: 16

Triangle ABC has one side of size 3. What are the other 2 sides?

1. One of the other two sides is 4
2. ABC is isosceles, it has 2 equal sides.

Possible Answers

**Selected Possible Answer**

- Statement 1 is sufficient alone
- Statement 2 is sufficient alone
- Together the statements are sufficient
- Each statement is sufficient on its own

- Together the statements are still insufficient

Question: 17

I have 5 shirts, some pants, and 6 pairs of shoes. How many pants do I have?

1. I have less pants than shoes.
2. I can make 90 different outfits from my clothes.

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b>                         |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone                |
| <input type="radio"/> | Statement 2 is sufficient alone                |
| <input type="radio"/> | Together the statements are sufficient         |
| <input type="radio"/> | Each statement is sufficient on its own        |
| <input type="radio"/> | Together the statements are still insufficient |

Question: 18

The ratio of the area of a square to the area of a circle is  $16 : \pi$ . What's the ratio of the side of the square to the diameter of the circle?

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b> |
|-----------------------|------------------------|
| <input type="radio"/> | 2:1                    |
| <input type="radio"/> | $\pi$ :1               |
| <input type="radio"/> | 4:1                    |
| <input type="radio"/> | 2: $\pi$               |
| <input type="radio"/> | 4: $\pi$               |

Question: 19

How many blows did the wolf need to flatten down the pig's house?

1. If the house was twice as big the wolf would need 54 blows
2. After 18 blows the house was two thirds of the way down.

Possible Answers

- | <b>Selected</b> | <b>Possible Answer</b> |
|-----------------|------------------------|
|-----------------|------------------------|

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

Question: 20

My rectangular pool has dimensions  $6 \times 10$ . I extend each length of the pool by 4 metres to create a walkabout around the pool. What's the area of half of that walkabout path?

Possible Answers

**Selected Possible Answer**

- 30
- 36
- 60
- 72
- 96

Question: 21

How many librarians should there be in the library?

1. It takes 1 librarian to fix up 10% of the library.
2. 10% of the library is equal to 250 books.

Possible Answers

**Selected**

**Possible Answer**

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

Question: 22

Choose the largest of these expressions if  $x$  is negative and  $y$  is positive.

Possible Answers

**Selected Possible Answer**

- $y$
- $x + y$
- $y - x$
- $\frac{y}{x}$
- $x - y$

Question: 23

Find  $2 + \frac{2}{2 + \frac{2}{2 + \frac{2}{3}}}$

Possible Answers

**Selected Possible Answer**

- $1/3$
- $4/27$
- $30/11$
- $81/8$
- $11/4$

Question: 24

Is  $k$  bigger than 6?

1.  $6^k$  is bigger than 50,000.
2.  $k^6$  is bigger than 10,000.

Possible Answers

**Selected**

**Possible Answer**

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

Question: 25

I'm inscribing a right-angled triangle AOB inside a circle with O at the centre and A,B on the perimeter of the circle. What's the area of the circle?

1. AB is  $\sqrt{18}$
2. The perimeter of AOB is  $6 + 3\sqrt{2}$ .

Possible Answers

- | Selected              | Possible Answer                          |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone          |
| <input type="radio"/> | Statement 2 is sufficient alone          |
| <input type="radio"/> | Together the statements are sufficient   |
| <input type="radio"/> | Each statement is sufficient alone       |
| <input type="radio"/> | Together the statements are insufficient |

Question: 26

Is x zero?

1.  $xy = x$
2.  $y = 57$

Possible Answers

- | Selected              | Possible Answer                          |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone          |
| <input type="radio"/> | Statement 2 is sufficient alone          |
| <input type="radio"/> | Together the statements are sufficient   |
| <input type="radio"/> | Each statement is sufficient alone       |
| <input type="radio"/> | Together the statements are insufficient |

Question: 27

I have 3 positive integers, a, b, and c, with a less than or equal to b and b less than or equal to c. Which of these can't possibly be the median of a, b and c?

Possible Answers

**Selected Possible Answer**

- a
- c
- $a + c$
- $c - a$
- $(a + c) / 3$

Question: 28

Point X is on the x-axis at (6, 0). Point Y is on the y-axis. XOY is a triangle with an edge at the origin and area of 45. What's the coordinate of y?

Possible Answers

**Selected Possible Answer**

- (0, 7.5)
- (0, 15)
- (0, 9)
- (9, 0)
- (7.5, 0)

Question: 29

The probability for 3 different crazy-cubes to come out 6 is  $1/6$ ,  $1/2$  and  $1/8$ , respectively. What's the probability that none of the cubes comes out 6?

Possible Answers

**Selected Possible Answer**

- $95/96$
- $19/24$
- $5/24$
- $71/96$
- $35/96$

Question: 30

I have a sequence of numbers. What's the third term in my sequence?

1. The first term is 2.
2. The second term is 4.

Possible Answers

- | Selected              | Possible Answer                          |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone          |
| <input type="radio"/> | Statement 2 is sufficient alone          |
| <input type="radio"/> | Together the statements are sufficient   |
| <input type="radio"/> | Each statement is sufficient alone       |
| <input type="radio"/> | Together the statements are insufficient |

Question: 31

In a game, each hit gets you 2, 5, 7, or 11 points depending on where you land. Every hit, your total score gets multiplied by your current number of points. If I scored a total of 84700 points, how many hits of 7 did I get?

Possible Answers

- | Selected              | Possible Answer |
|-----------------------|-----------------|
| <input type="radio"/> | 0               |
| <input type="radio"/> | 1               |
| <input type="radio"/> | 2               |
| <input type="radio"/> | 3               |
| <input type="radio"/> | 4               |

Question: 32

Is  $ax = y - bx$ ?

1.  $a = b = y$
2.  $\frac{y}{x} = a + b$

Possible Answers

- | Selected              | Possible Answer                        |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone        |
| <input type="radio"/> | Statement 2 is sufficient alone        |
| <input type="radio"/> | Together the statements are sufficient |

- Each statement is sufficient alone
- Together the statements are insufficient

Question: 33

Find  $\frac{1}{a} + \frac{1}{b}$ .

1.  $a + b = 5$
2.  $ab = 6$ .

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b>                   |
|-----------------------|--|
| <input type="radio"/> | Statement 1 is sufficient alone          |
| <input type="radio"/> | Statement 2 is sufficient alone          |
| <input type="radio"/> | Together the statements are sufficient   |
| <input type="radio"/> | Each statement is sufficient alone       |
| <input type="radio"/> | Together the statements are insufficient |

Question: 34

There are 500 candies. If 350 have sprinkles and 300 have chocolate chips, and at least 60 have neither sprinkles nor chocolate chips, the number of candies that have both is in this range:

Possible Answers

- | <b>Selected</b>       | <b>Possible Answer</b> |
|-----------------------|------------------------|
| <input type="radio"/> | 40 and 120             |
| <input type="radio"/> | 80 and 180             |
| <input type="radio"/> | 180 and 320            |
| <input type="radio"/> | 210 and 300            |
| <input type="radio"/> | 300 and 350            |

Question: 35

Choose the false statement for a positive integer  $x$ , about  $x(x + 1)(x + 2)$

Possible Answers

**Selected**      **Possible Answer**

- It's divisible by 3
- It's divisible by 6
- It's even if x is even
- It's divisible by 4 if x is even
- It's odd if x is odd

Question: 36

What's the value of angle K?

1. Angle K is inscribed between 2 lines of length 5.
2. Angle K is across from a side whose squared value equals the sum of the square value of the sides inscribing angle K

Possible Answers

**Selected**      **Possible Answer**

- Statement 1 is sufficient alone
- Statement 2 is sufficient alone
- Together, the statements are sufficient
- Each statement is sufficient alone
- Together the statements are insufficient

Question: 37

J is less than 250 and  $\frac{10J}{52}$  is an integer. How many difference positive integer values can J take on?

Possible Answers

**Selected**      **Possible Answer**

- 6
- 7
- 8
- 9
- 10