Question 1 of 25

In the diagram, find the length of AB .
(A) ABCD is a rectangle.
(B) $\mathrm{AC}-\mathrm{AE}=\mathrm{AB}+\mathrm{BE}$ and $\mathrm{AC}=5$.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 2 of 25
What is the value of P ?
(A) $P=4 q$
(B) $q=4 P$

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 3 of 25
Is ABCD a square?
(A) AB is parallel to CD
(B) BCD is an equilateral triangle

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 4 of 25
A marathon runner running along a prescribed route passes through neighborhoods $\mathrm{J}, \mathrm{K}, \mathrm{L}$, and not necessarily in that order. How long does it take to run from J to M ?
(A) The runner averages 8 km per hours on the route from J to M .
(B) M is 4 km from K and 12 km from L , but J is 15 km from K .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 5 of 25
M has qualified to become a police officer. Has A qualified to become a police officer?
(A) If A qualifies to become a police officer, $M$ will qualify to become a police officer.
(B) If A does not qualify to become a police officer, then M will not qualify to become a police officer.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 6 of 25
Is an integer?
(A) -345 is an integer.
(B) is an integer.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 7 of 25
What is the volume of cube X ?
(A) The diagonal of one of the faces of $X$ is ?6.
(B) The diagonal of the cube from the upper rear corner to the lower front right corner is 3 .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 8 of 25
What is the value of p 8 ? q 8 ?
(A) $\mathrm{p} 7+\mathrm{q} 7=127$
(B) $\mathrm{p}-\mathrm{q}=0$

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 9 of 25
Is X a negative number?
(A) $4 \mathrm{X}+24>0$
(B) $4 \mathrm{X} ? 24<0$

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 10 of 25
In the figure, a rectangle is divided into smaller rectangles of the same shape and size. What is the area of the large rectangle?
(A) The length of the darkened path at the top of the diagram is 45 .
(B)The length of the darkened path at the bottom of the diagram is 39 .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 11 of 25
Does $(\mathrm{X}+\mathrm{Y}) 2+(\mathrm{X}$ ? Y$) 2$ equal 170 ?
(A) $\mathrm{X} 2+\mathrm{Y} 2=85$
(B) $\mathrm{X}=7$ and $\mathrm{Y}=6$

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 12 of 25
What is the 99th term of the series $S$ ?
(A) The first 4 four terms are $(1+1) 2,(2+1) 2,(3+1) 2$, and $(4+1) 2$.
(B) For every $X$, the $X$ th term of $S$ is $(X+1) 2$.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 13 of 25
If X and Y are integers, is X less than Y ?
(A) The cube of X is less than the cube of Y .
(B) The square of X is less than the square of Y .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 14 of 25
When one piece of fruit is taken at random from a fruit bowl, what is the chance that it is a an apple?
(A) There .are half as many apples as oranges in the fruit bowl.
(B) A third of the fruit in the fruit bowl are oranges.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 15 of 25
How many chocolate bars 2 inches wide and 4 inches long can be packed into carton Q ?
(A) The inside dimensions of carton Q are 8 inches by 8 inches by 12 inches.
(B) The width of carton Q is equal to the height and $3 / 4$ of the length.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 16 of 25
If the area of a rectangle is 20 , what is its perimeter?
(A) The length of the rectangle is 5 .
(B) The width of the rectangle is 1 unit less than its length.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 17 of 25
Is the average of ten integers greater than 10 ?
(A) Half of the integers are greater than 10 .
(B) Half of the integers are less than 10 .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 18 of 25
Is $\mathrm{A}>\mathrm{B}$ ?
(A) AX $>$ BX
(B) $\mathrm{X}<0$

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 19 of 25
What is the length of the diagonal of a certain rectangle?
(A) The area of the rectangle is 16 .
(B) The perimeter of the rectangle is 16 .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 20 of 25
If T weighs X Kg , where X is a whole number, what is T's weight?
(A) If T gains 6 Kg , he will weigh less than 86 Kg .
(B) If T gains 8 Kg , he will weigh more than 86 Kg .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 21 of 25
Is the integer T divisible by 15 ?
(A) The sum of the digits of T equals 15 .
(B) The units digit of T is 3 .

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 22 of 25
What is the length of the diagonal of a cube?
(A) The sides of the cube have length 1 .
(B) The diagonals of the faces of the cube have length ?2.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 23 of 25
How long did a round trip take?
(A) The outward, journey took 1 hour longer than the return journey.
(B) The return journey was 75 miles.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Question 24 of 25

Points R, S, T and U are on line RU as shown. Which is larger, TU or ST?
(A) RU is 15 units long.
(B) Points S and T trisect line segment RU

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.

Mark for revision | Unmark
Question 25 of 25
John, Peter, and Paul together have ten marbles. If each has at least one marble, how many marbles does each boy have?
(A) John has 5 more than Paul.
(B) Peter has half as many as John.

1. If the question can be solved using any one of the statements.
2. If the question can be solved using either of the statements.
3. If the question can be solved using both but not either alone.
4. If the question cannot be solved using the given statements.
