



**Data Sufficiency – Practice Exercise**

14. If  $a$  and  $b$  are positive integers, is  $\frac{a}{b} = \frac{2}{3}$  ?  
 (1)  $3a = 2b$   
 (2) For integers  $m$  and  $n$ ,  $a = 2m$  and  $b = 3n$
15.  $G$ ,  $P$ , and  $S$  are animal species. What is the average life span, in year, of  $S$  ?  
 (1) The average life span of  $S$  is twice that of  $P$  and  $\frac{4}{5}$  that of  $G$ .  
 (2) The average life span of  $G$  is 30 years longer than that of  $P$  and 10 years longer than that of  $S$ .
16. If point  $X$  is inside a circle with center  $O$  and radius 2, is point  $Y$  inside the same circle?  
 (1)  $OX = 1$  (2)  $XY = 2\frac{1}{2}$
17. Four dollar amounts,  $w$ ,  $x$ ,  $y$ , and  $z$ , were invested in a business. Which amount was greatest?  
 (1)  $y < z < x$   
 (2)  $x$  was 25 percent of the total of the four investments.
18. If the measures of the three interior angles of a triangle are  $y^\circ$ ,  $15x^\circ$ , and  $18x^\circ$ , what is the value of  $y$  ?  
 (1)  $x = 5$  (2)  $15x + y = 90$
19. What is the average (arithmetic mean) of  $x$  and  $y$  ?  
 (1)  $\frac{x}{2} + \frac{y}{2} = 10$  (2)  $x = 2y$
20. How many bags of grass seed were used for rectangular lawn  $X$  ?  
 (1) Lawn  $X$  has a perimeter of 720 feet.  
 (2) One bag of grass seed was used for each 5,000 square feet of lawn  $X$
21. If  $x$  and  $y$  are positive, is  $y < 2$  ?  
 (1)  $x > 2y$  (2)  $x < y + 2$
22. If  $n$  is a positive integer, is  $n$  divisible by at least six positive integers?  
 (1)  $n$  is the product of three different prime numbers.  
 (2)  $n = 30$
23. A car traveled a distance of  $d$  miles in  $t$  minutes at an average rate of  $r$  miles per minute. What is the ratio of  $d$  to  $r$  ?  
 (1)  $t = 30$  (2)  $d = 25$
24. If  $b$  is the product of three consecutive positive integers  $c$ ,  $c + 1$ , and  $c + 2$ , is  $b$  a multiple of 24 ?  
 (1)  $b$  is a multiple of 3, (2)  $c$  is odd.
25. If  $x$  is a positive number, what is the value of  $x$  ?  
 (1)  $|x - 2| = 1$  (2)  $x^2 = 4x - 3$

**Answer Key:**

1-E	2-D	3-C	4-C	5-D	6-E	7-B	8-A	9-D	10-C
11-B	12-A	13-B	14-A	15-C	16-E	17-C	18-D	19-A	20-E
21-C	22-D	23-A	24-A	25-E					