

GMAT QUANT PRACTICE PAPER

- In the xy -coordinate plane, two vertices of a square are at $(5, 3)$ and $(5, -2)$. Which of the following COULD NOT be the coordinates of another of the square's vertices?
 - $(0, -2)$
 - $(0, 3)$
 - $(2, -3)$
 - $(10, -2)$
 - $(10, 3)$
- A and B travel the same distance at speeds of 9Km/hr and 10Km/hr respectively. If A takes 36minutes more than that of B, the distance traveled by each is
 - 48 km
 - 54 Km
 - 60 Km
 - 66 Km
 - None of these
- If $t = 1x - 1t = 1x - 1$, then in terms of t , $x + 2x - 1t$, $x + 2x - 1$ is equal to
 - $t + 3tt + 3t$
 - $tt + 3tt + 3$
 - $t3t + 1t3t + 1$
 - $3t + 1t3t + 1t$
 - $3t + 1$
- Which of the following is equivalent to $xy + 2xy(1+y)^2xy + 2xy(1+y)^2y$?
 - $xy(2y+1)^2xy(2y+1)^2$
 - $(2xy+1)(2xy-1)(2xy+1)(2xy-1)$
 - $(2x+y)^2(2x+y)^2$
 - $(x+2y)^2(x+2y)^2$
 - $y(x-2y)^2$
- If money is invested at r percent interest, compounded annually, the amount of the investment will double in approximately $70/r$ years. If Chris invests \$1,000 in a bond that pays 4 percent interest, compounded annually, what will be the approximate total amount of the investment 35 years later?
 - \$4,000
 - \$2,200

- C. \$2,000
D. \$1,800
E. \$1,200
6. Drum x is $\frac{1}{2}$ full of oil and drum y, which has twice the capacity of drum x is $\frac{2}{3}$ full of oil. If all of the oil in drum x is poured into drum y, then drum y will be filled to what capacity?
- A. $\frac{3}{4}$
B. $\frac{5}{6}$
C. $\frac{11}{12}$
D. $\frac{7}{6}$
E. $\frac{11}{6}$
7. The "competitive edge" of a baseball team is defined by the formula $\sqrt{\frac{W}{L}}$ where W represents the number of the team's wins, and L represents the number of the team's losses. This year, the GMAT All-Stars had 3 times as many wins and one-half as many losses as they had last year. By what factor did their "competitive edge" increase?
- A. $\sqrt{2}$
B. $\sqrt{6}$
C. $\sqrt{12}$
D. 6
E. 12
8. If the probability of rain on any given day in City X is 50 percent, what is the probability that it rains on exactly 3 days in a 5-day period?
- (A) $\frac{8}{125}$
(B) $\frac{2}{25}$
(C) $\frac{5}{16}$
(D) $\frac{8}{25}$
(E) $\frac{3}{4}$
9. Julia purchased a car on an installment plan. She made a down payment of \$2,550 and then made n monthly payments of \$155 each. If Julia paid a total of \$9,060 for the car, how many monthly payments did she make?
- A. 30
B. 36
C. 42
D. 48
E. 54
10. Walking at $\frac{4}{7}$ th of his usual speed, Randy takes 15 minutes longer to cover the distance from home to work. What is the time he needs to cover that distance at his usual speed?
- A. 20 min
B. 24 min
C. 25 min
D. 27 min
E. 30 min
11. The standard deviation of which of the following is equivalent to that of $\{m, r, p, n\}$?

- A. $2m, 2r, 2p, 2n$
- B. $m+2, r+2, p+2, n+2$
- C. $|m|, |r|, |p|, |n|$
- D. $1/m, 1/r, 1/p, 1/n$
- E. $\{m^2, r^2, p^2, n^2\}$

12. How many different values of positive integer x , for which $|x+8| < x|x+8| < x$, are there?

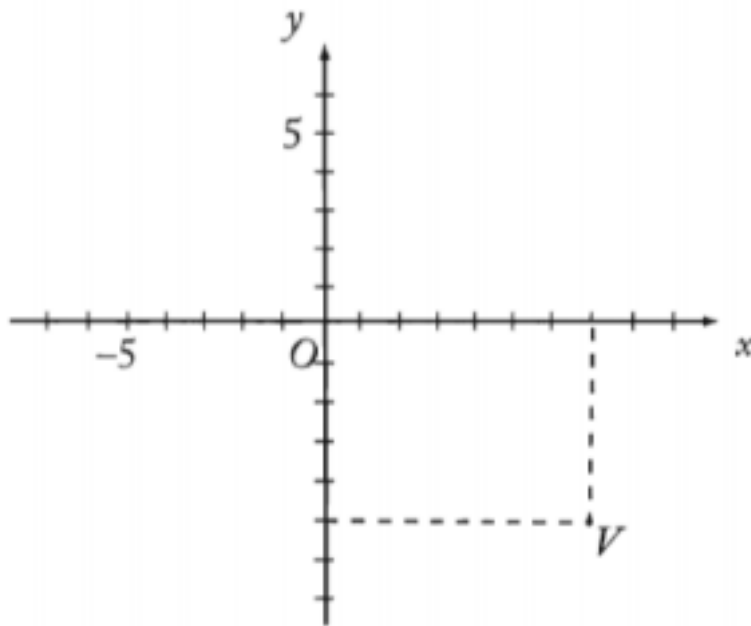
- A. 0
- B. 2
- C. 3
- D. 8
- E. 16

13. Steve traveled the first 2 hours of his journey at 40 mph and the remaining 3 hours of his journey at 80 mph. What is his average speed for the entire journey?

- A. 60 mph
- B. 56.67 mph
- C. 53.33 mph
- D. 64 mph
- E. 66.67 mph

14. Which of the following lines in the xy -plane does not contain any point with integers as both coordinates?

- (A) $y = x$
- (B) $y = x + 1/2$
- (C) $y = x + 5$
- (D) $y = x^{1/2}$
- (E) $y = x/2 + 5$



15. In the figure above, the coordinates of point V are
- (A) $(-7,5)$
 - (B) $(-5,7)$
 - (C) $(5,7)$
 - (D) $(7,5)$
 - (E) $(7,-5)$
16. What is the probability of flipping a fair coin two times and the coin landing on heads on both flips?
- A. $1/8$
 - B. $1/4$
 - C. $1/2$
 - D. $3/8$
 - E. $3/4$
17. A school supply store sells only one kind of desk and one kind of chair, at a uniform cost per desk or per chair. If the total cost of 3 desks and 1 chair is twice that of 1 desk and 3 chairs, then the total cost of 4 desks and 1 chair is how many times that of 1 desk and 4 chairs?
- A. 5
 - B. 3
 - C. $8/3$
 - D. $5/2$
 - E. $7/3$
18. The average (arithmetic mean) of 6,8, and 10 equals the average of 7,9 and
- A) 5
 - B) 7

C) 8

D) 9

E) 11

19. How many integers x satisfy both $2 < x \leq 4$ and $0 \leq x \leq 3$?

A. 5

B. 4

C. 3

D. 2

E. 1

20. The sequence $a_1, a_2, a_3, \dots, a_n, \dots$ is such that $a_n = a_{n-1} + a_{n-2}$ for all $n \geq 3$. If $a_3 = 4$ and $a_5 = 20$, what is the value of a_6 ?

(A) 12

(B) 16

(C) 20

(D) 24

(E) 28

21. For all numbers $a, b, c,$ and $d,$ $\begin{vmatrix} a & b \\ c & d \end{vmatrix}$ is defined by the equation $\begin{vmatrix} a & b \\ c & d \end{vmatrix} = ad - cb$.

Which of the following is equal to $\begin{vmatrix} s & t \\ 1 & 3 \end{vmatrix} - \begin{vmatrix} -t & 2 \\ s & 4 \end{vmatrix} + \begin{vmatrix} 2 & 2 \\ t & s \end{vmatrix}$?

A. $\begin{vmatrix} s & t \\ 1 & 5 \end{vmatrix}$

B. $\begin{vmatrix} s & t \\ 7 & 1 \end{vmatrix}$

C. $\begin{vmatrix} s & t \\ 5 & 7 \end{vmatrix}$

D. $\begin{vmatrix} s & -t \\ 1 & 5 \end{vmatrix}$

E. $\begin{vmatrix} s & -t \\ 1 & 7 \end{vmatrix}$

22. Portia purchased a laptop for \$480, but after checking the merchant's website realized that she had been overcharged by 20%. By how much, in dollars, was she overcharged?

- A. \$24
- B. \$48
- C. \$80
- D. \$96
- E. \$100

23. Salad dressing A is made up of 30% vinegar and 70% oil, and salad dressing B contains 10% vinegar and 90% oil. If the 2 dressing are combined to produce a salad dressing that is 15% vinegar, dressing A comprises what % of the new dressing?

- A. 15%
- B. 20%
- C. 25%
- D. 40%
- E. 55%

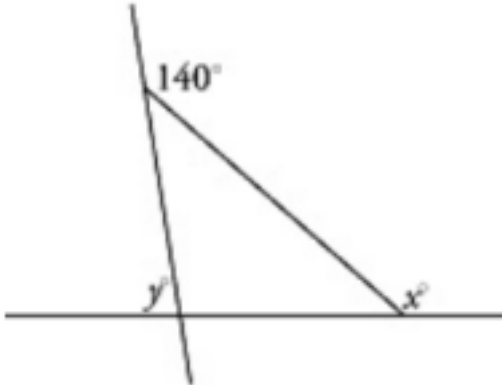
24. If n is an integer and $3n^2$ is a perfect square, the smallest possible value of n is

- A. 3
- B. 7
- C. 21
- D. 42

E. 147

25. What is the area of an equilateral triangle whose one side length is 60?

- A. $300\sqrt{3}$
- B. $400\sqrt{3}$
- C. $450\sqrt{3}$
- D. $600\sqrt{3}$
- E. $900\sqrt{3}$



26.

In the figure above, $x + y =$

- A. 40
- B. 120
- C. 140
- D. 180
- E. 220

27. Which of the following is equivalent to 21232123 ?

- A. 2424
- B. 2222
- C. 1212
- D. 122122
- E. 124

28. Of the final grades received by the students in a certain math course, $\frac{1}{5}$ are A's, $\frac{1}{4}$ are B's, $\frac{1}{2}$ are C's, and the remaining 10 grades are D's. What is the number of students in the course?

- (A) 80
- (B) 110
- (C) 160
- (D) 200
- (E) 400

29. David has d books, which is 3 times as many as Jeff and $\frac{1}{2}$ as many as Paula. How many books do the three of them have altogether, in terms of d ?

(A) $56*d$

(B) $73*d$

(C) $103*d$

(D) $72*d$

(E) $92*d$

30. Donna gets a 10% increase in salary every two years. If her annual salary in 2004 was \$121,000, what was her annual salary in 2000?

A. \$95,000

B. \$100,000

C. \$110,000

D. \$116,000

E. \$121,100