

# GMAT QUANT PRACTICE PAPER 18

## SET 1

1. The distance from town A to town B is five miles. C is six miles from B. Which of the following could be the distance from A to C?

I 11

II 1

III 7

A. I only

B. II only

C. I and II only

D. II and III only

E. I, II, or III.

2.  $\sqrt{5}$  percent of  $5\sqrt{5} =$

A. 0.05

B. 0.25

C. 0.5

D. 2.5

E. 25

3. If  $pqr = 1$ ,  $rst = 0$ , and  $spr = 0$ , which of the following must be zero?

A. P

B. Q

C. R

- D. S
- E. T

$$\frac{6^5 - 6^4}{5} =$$

4.

A. 1/5

B. 6/5

C. 6<sup>3</sup>

4

D. 6    E. 6  
/ 5

4

5. -20 , -16 , -12 , -8 ....

In the sequence above, each term after the first is 4 greater than the preceding term. Which of the following could not be a term in the sequence?

A. 0

B. 200

C. 440

D. 668

E. 762

6.  $\clubsuit n$  denotes the number obtained when  $n$  is rounded to the nearest tenth. For example  $\clubsuit 4.31 = 4.3$

$$\clubsuit 0.089 - \clubsuit 1.135 =$$

- A. 1.05
- B. 1.04

C. -1.05

D. -1.0

E. -0.1

7. For how many integer values of  $n$  will the value of the expression  $4n + 7$  be an integer greater than 1 and less than 200?

A. 48

B. 49

C. 50

D. 51

E. 52

$$\begin{array}{r} 5A \\ \underline{BC} \\ D43 \end{array}$$

8. In the above correctly worked addition sum,  $A, B, C$  and  $D$  represent different digits, and all the digits in the sum are different. What is the sum of  $A, B, C$  and  $D$ ?

A. 23

B. 22

C. 18

D. 16

E. 14

9. 12 litres of water are poured into an aquarium of dimensions 50cm length, 30cm breadth, and 40cm height. How high (in cm) will the water rise?  
(1 litre = 1000cm<sup>3</sup>)

A. 6

B. 8

C. 10

D. 20

E. 40

10. Six years ago Anita was P times as old as Ben was. If Anita is now 17 years old, how old is Ben now in terms of P ?

A.  $11/P + 6$

B.  $P/11 + 6$

C.  $17 - P/6$

D.  $17/P$

E.  $11.5P$

## SET 2

1. Sheila works 8 hours per day on Monday, Wednesday and Friday, and 6 hours per day on Tuesday and Thursday. She does not work on Saturday and Sunday. She earns \$324 per week. How much does she earn in dollars per hour?

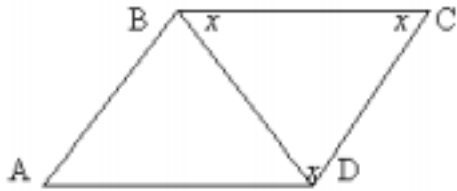
A. 11

B. 10

C. 9

D. 8

E. 7



2. ABCD is a parallelogram.  $BD = 2$ . The angles of triangle BCD are all equal. What is the perimeter of the parallelogram?

A. 12

B.  $9\sqrt{3}$

C. 9

D. 8

E.  $3\sqrt{3}$

3. If the product of 6 integers is negative, at most how many of the integers can be negative?

A. 2

B. 3

C. 4

D. 5

E. 6

4. If a positive integer  $n$ , divided by 5 has a remainder 2, which of the following must be true?

I  $n$  is odd

II  $n + 1$  cannot be a prime number

III  $(n + 2)$  divided by 7 has remainder 2

A. none

B. I only

C. I and II only

D. II and III only

E. I, II and III

5. A solid cube of side 6 is first painted pink and then cut into smaller cubes of side 2. How many of the smaller cubes have paint on exactly 2 sides?

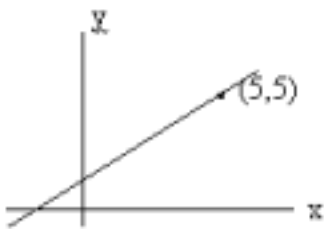
A. 30

B. 24

C. 12

D. 8

E. 6



6. The slope of the line passing through the point  $(5, 5)$  is  $5/6$ . All of the following points could be on the line except

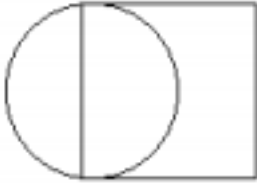
A.  $(2.5, 2)$

B.  $(11, 10)$

C.  $(8, 7.5)$

D. (-1, 0)

E. (-7, -5)



7. In the figure above the square has two sides which are tangent to the circle. If the area of the circle is  $4a^2\pi$ , what is the area of the square?

A.  $2a^2$

B.  $4a$

C.  $4a^2$

D.  $16a^2$

E.  $64a^2$

8. A triangle has a perimeter 13. The two shorter sides have integer lengths equal to  $x$  and  $x + 1$ . Which of the following could be the length of the other side?

A. 2

B. 4

C. 6

D. 8

E. 10

9. A machine puts  $c$  caps on bottles in  $m$  minutes. How many hours will it take to put caps on  $b$  bottles?

A.  $60bm/c$

B.  $\frac{bm}{60c}$

C.  $\frac{bc}{60m}$

D.  $\frac{60b}{cm}$

E.  $\frac{b}{60cm}$

10. Paint needs to be thinned to a ratio of 2 parts paint to 1.5 parts water. The painter has by mistake added water so that he has 6 litres of paint which is half water and half paint. What must he add to make the proportions of the mixture correct?

A. 1 litre paint

B. 1 litre water

C.  $\frac{1}{2}$  litre water and one litre paint

D.  $\frac{1}{2}$  litre paint and one litre water

E.  $\frac{1}{2}$  litre paint

## SET 3

1. Which of the following can be used to illustrate that not all prime numbers are odd?

A. 1

B. 2

C. 3

D. 4

E. 5

2. What is the greatest of 3 consecutive integers whose sum is 24 ?

A. 6

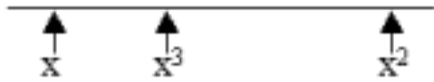
B. 7



C. 8

D. 9

E. 10



3. Considering the positions on the number line above, which of the following could be a value for  $x$ ?

A.  $5/3$

B.  $3/5$

C.  $-2/5$

D.  $-5/2$

E. none

4. A piece of ribbon 4 yards long is used to make bows requiring 15 inches of ribbon for each. What is the maximum number of bows that can be made?

A. 8

B. 9

C. 10

D. 11

E. 12

5. How many numbers between 200 and 400 meet **one or both** of the conditions given in the two statements below?

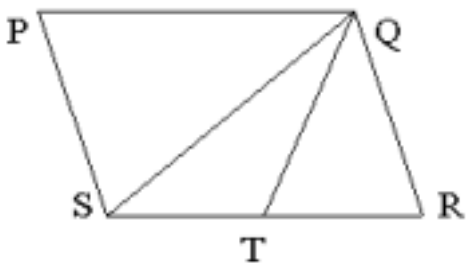
Statement 1: The number begins with 3

Statement 2: The number ends with 3

- A. 20
- B. 60
- C. 100
- D. 110
- E. 120

6. 6 pints of a 20 percent solution of alcohol in water are mixed with 4 pints of a 10 percent alcohol in water solution. The percentage alcohol in the new solution is

- A. 16
- B. 15
- C. 14
- D. 13
- E. 12



7. PQRS is a parallelogram and  $ST = TR$ . What is the ratio of the area of triangle QST to the area of the parallelogram?

- A. 1 : 2
- B. 1 : 3

C. 1 : 4

D. 1 : 5

E. it cannot be determined

8. A picture is copied onto a sheet of paper 8.5 inches by 10 inches. A 1.5 inch margin is left all around. What area in square inches does the picture cover?

A. 76

B. 65

C. 59.5

D. 49

E. 38.5

<u>Number of accidents</u>	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Number of drivers	17	13	21	4	2	2	1

9. The table shows the results of a poll which asked drivers how many accidents they had had over the previous 5 years. What is the median number of accidents per year?

A. 0.5

B. 1

C. 1.5

D. 2

E. 4

10. If  $V = \frac{12R}{r + R}$ , then  $R =$

A.  $Vr / (12 - V)$

B.  $Vr + V / 12$

C.  $Vr - 12$

D.  $V / r - 12$

E.  $V (r + 1) / 12$

## SET 4

1. The number 0.127 is how much greater than  $1/8$  ?

A.  $\frac{1}{2}$

B.  $\frac{2}{10}$

C.  $\frac{1}{50}$

D.  $\frac{1}{500}$

E.  $\frac{2}{500}$

2. Which of the following could not be the lengths of the sides of a right angled triangle?

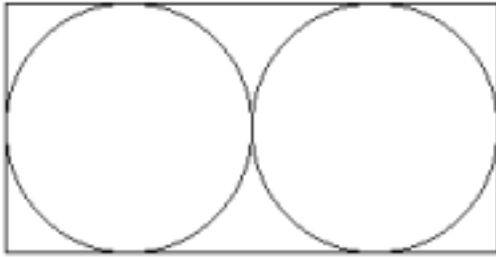
A. 3, 4, 5

B. 5, 12, 13

C. 8, 15, 17

D. 12, 15, 18

E. 9, 12, 15



3. Two equal circles are cut out of a rectangle of card of dimensions 16 by 8. The circles have the maximum diameter possible. What is the approximate area of the paper remaining after the circles have been cut out?

- A. 104
- B. 78
- C. 54
- D. 27
- E. 13

$$\frac{a^2 - b^2}{a + b} =$$

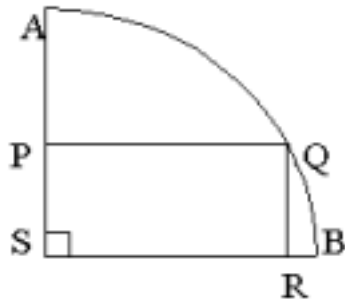
4. If  $a$  and  $b$  are both positive, which of the following is a simplification of the expression above?

- A.  $a^2 + b^2 + 1$
- B.  $a + b$
- C.  $a - b$
- D.  $ab$
- E. it cannot be simplified further

5.  $x = y - (50/y)$ , where  $x$  and  $y$  are both  $> 0$

If the value of  $y$  is doubled in the equation above, the value of  $x$  will

- A. decrease
- B. stay the same
- C. increase four fold
- D. double
- E. increase to more than double



6. ASB is a quarter circle. PQRS is a rectangle with sides  $PQ = 8$  and  $PS = 6$ . What is the length of the arc AQB ?

- A.  $5\pi$
- B.  $10\pi$
- C. 25
- D. 14
- E. 28

7. The number of degrees that the hour hand of a clock moves through between noon and 2.30 in the afternoon of the same day is

- A. 720
- B. 180

C. 75

D. 65

E. 60

8. Jeff takes 20 minutes to jog around the race course one time, and 25 minutes to jog around a second time. What is his average speed in miles per hour for the whole jog if the course is 3 miles long?

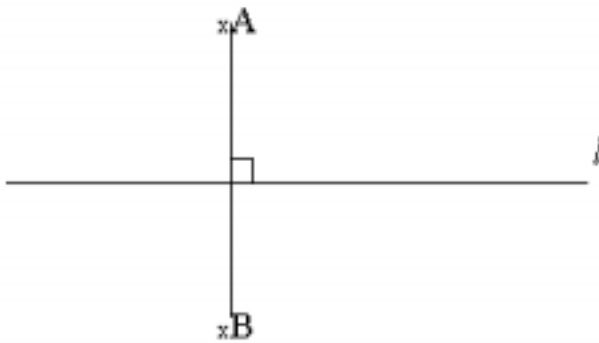
A. 6

B. 8

C. 10

D. 12

E. 14



9. A and B are equidistant from the line  $l$ . How many circles can be drawn with their centres on line  $l$  and that pass through both A and B?

A. 1

B. 2

C. 3

D. 4

E.  $>10$

**10.** A wheel has a diameter of  $x$  inches and a second wheel has a diameter of  $y$  inches. The first wheel covers a distance of  $d$  feet in 100 revolutions. How many revolutions does the second wheel make in covering  $d$  feet?

A.  $100xy$

B.  $100y - x$

C.  $100x - y$

D.  $100y / x$

E.  $100x / y$