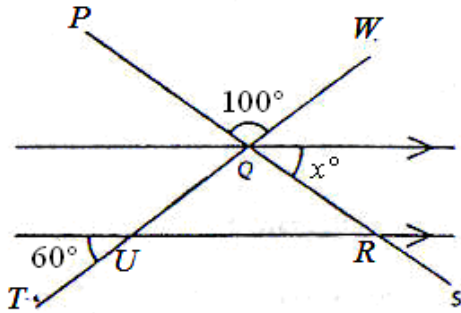1)

Diagram 2

In the diagram 2, *PQRS* and *TUQW* are straight lines. The value of *x* is

A. 20   C. 50
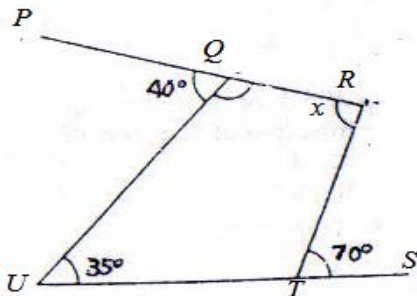B. 40   D. 80

2)

Diagram 5

In the diagram 5, *PQR* and *UTS* are straight lines. The value of *x* is

A. 55   C. 105
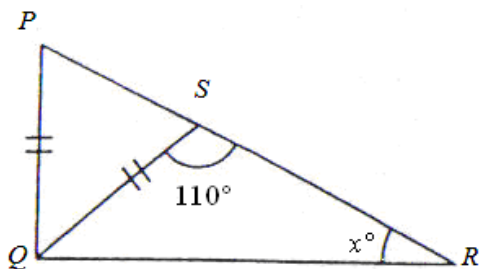B. 75   D. 145

3)

Diagram 6

In the diagram 6, *PSR* is a straight line. The value of *x* is

A. 20   C. 50
B. 40   D. 70

4) In the diagram 16, *EFGHJK* is half of regular decagon with center *O* while *KLME* is half of a regular hexagon with center *O*.
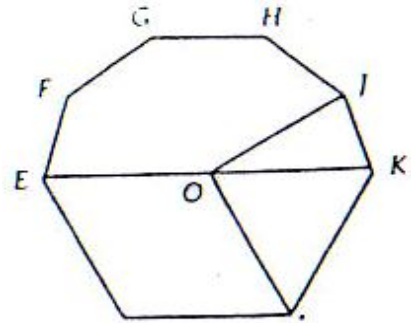

Diagram 16

Find the value of $\angle JOL$.

A. 72   C. 96
B. 90   D. 120

5)

Diagram 10

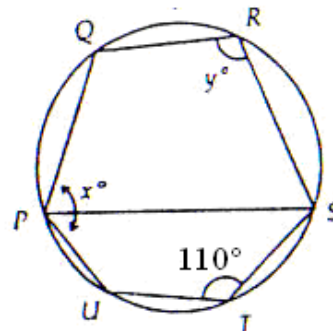The diagram 10 shows a circle PQRSTU. Find the value of x + y?
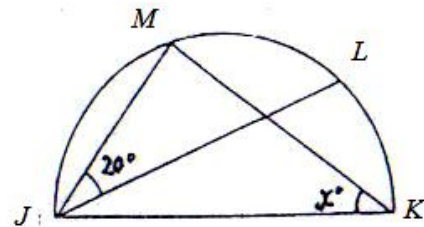
A. 180   C. 240
B. 190   D. 250

6)

Diagram 13

In the diagram 13, JKLM is a semicircle and JK is the diameter. The length of arc ML is the same as the length of arc LK. The value of x is

A. 35   C. 50
B. 40   D. 70

7)

Score	0	1	2	3	4
Frequency	1	7	0	x	2

Table 1

Table 1 shows the frequency of scores in a competition. If the mode is 3, then the possible value of x is

A. 3
B. 5
C. 7
D. 8

8)

Group	Capital	Profit
A	RM 50	RM 4.50
B	RM 60	RM 4.80
C	RM 40	RM 3.80
D	RM 20	RM 1.40

Table 2

Table 2 shows the information about the capital and the profit of enterprise projects by 4 groups of students. Which of the following groups **A, B, C**, and **D** has the highest percentage of profit?

9)

Colour of Balloons	Number
Red	40
Yellow	X
Blue	30
Green	20

Table 3

The table 3 shows the number of colored balloons found in a stall. The information is represented in a pie chart. Given that the angle of the sector of red balloons is 120°, which statement is not true about the angle in the pie chart?

A. The angle of sector for red balloons is the largest.
B. The angle of the sector for yellow balloons is the smallest.
C. The angle of sector for yellow and blue balloons is equal.
D. The angle of sector for green balloons is smaller than the angle of sector for yellow balloons.

10)

Number of Siblings	Tally
6	ЖⅠ Ⅱ
5	ЖⅠ ЖⅠ Ⅰ
4	ЖⅠ Ⅲ
3	ЖⅠ ЖⅠ
2	ⅠⅠ Ⅰ Ⅰ

Table 4

Table 4 shows the number of siblings of 40 students. If the number of siblings is more than 2, then the student must buy coupons for his school funfair. The correct step in determining the percentage of the students who have to buy the coupons is?

A. $\dfrac{4}{40} \times 100$ C. $\dfrac{20}{40} \times 100$

B. $\dfrac{10}{40} \times 100$ D. $\dfrac{36}{40} \times 100$

11) $\dfrac{1}{3x} + \dfrac{x}{9} =$

A. $\dfrac{1+3}{3x}$ C. $\dfrac{3+x^2}{9x}$

B. $\dfrac{1+x}{9x}$ D. $\dfrac{3+x}{18x}$

12)   Given that $4n - 3(1-n) = 11$ then $n =$

A. 2   C. $\dfrac{8}{7}$

B. 8   D. $\dfrac{14}{3}$

13)   Factorize $2p^2 + 11p - 6$

A. (2p-3) (p+2)
B. (2p+3) (p-2)
C. (2p-1) (p+6)
D. (2p+1) (p-6)

14)   Given x = 3 and y = 1, then $\dfrac{x^2 - 2y^3}{y} =$

A. -11   C. 4
B. -8   D. 7

15)   Simplify $\dfrac{6(k - 3m)^2}{4km - 12m^2}$

A. $\dfrac{3}{2m}$ C. $\dfrac{3}{4m - 2}$

B. $\dfrac{3(k - 3m)}{2m}$ D. $\dfrac{3(k - 3)}{2}$

2

16) Given $\dfrac{5}{2p+k} = 4$, then $p =$

A. $\dfrac{1-k}{2}$

B. $\dfrac{20-k}{2}$

C. $\dfrac{5-k}{8}$

D. $\dfrac{5-4k}{8}$