数学复习（初二）

1. 下列各式正确的是

   Which of the following is correct?

   A. $\sqrt{3}+\sqrt{5}=\sqrt{8}$　B.$-\sqrt{(-5)^2}=5$　C.$(-\sqrt{5})^2=5$　D.$\sqrt{(-5)^2}=-5$

2. 若$\sqrt{3.1}=1.761,\sqrt{31}=5.568$, 则$\sqrt{31000}$

   Given$\sqrt{3.1}=1.761,\sqrt{31}=5.568$, *find* $\sqrt{31000}$

   A. 176.1　B.556.8　C.1761　D.5568

3. $\sqrt[3]{-0.008}=$

   A. -0.2　B. -0.02　C. 0.02　D. 0.2

4. 下列那一对是方程式$5x-2y=10$的解

   Which of the following pairs are the solution for equation $5x-2y=10$

   A. $\begin{cases}x=0\\y=5\end{cases}$　B. $\begin{cases}x=2\\y=2\end{cases}$　C. $\begin{cases}x=4\\y=-5\end{cases}$　D. $\begin{cases}x=-2\\y=-10\end{cases}$

5. 甲、乙两人共有 RM 1300。如果甲给乙 RM 40 后，那么甲的钱恰好是乙的 3 倍。问原来甲有多少钱?

   A and B have a total of RM 1300. If the A give RM RM 40 to B, then the money A has is exactly three times of B. How much A owned at first?

   A. RM 285　B. RM 985　C. RM 1015　D.RM 1260

6. 已知直线$y=kx-5$通过点（-2，1），求此直线 与 x 轴的交点坐标。

   Given straight line $y=kx-5$ *passes through point (-2,1), find the intersection point of the straight line on x -axis.*

   A. $(-\frac{5}{3},0)$　B.$(-\frac{3}{5},0)$　C.(0,-5)　D.(0,5)

7. 下列哪一组线段能组成三角形?

   Which of the following group can form an exact triangle ?

   A. 3cm, 2cm, 6cm　B.3cm, 4cm, 7cm　C.4cm, 4cm, 4cm　D.6cm, 2cm, 10cm

8. 已知三角形三个内角的比是 1：2：3， 它的最大角是

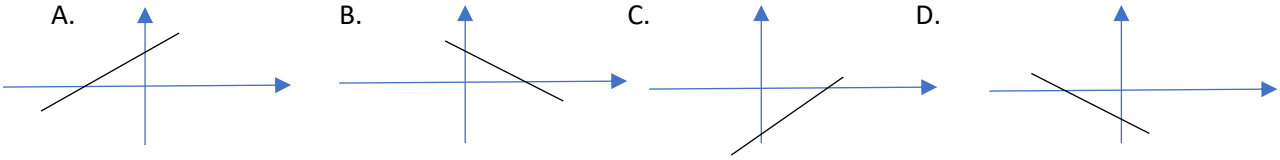
   Given the ratio of angles in a triangle is 1:2:3, find the largest angle

   A. 60°　B.70°　C.80°　D.90°

9. 若 a>0, b>0, 下列哪个是图象方程式 $ax+by+3=0$ 的图象?

   If a>0, b>0, which of the following graph represent $ax+by+3=0$ *?*

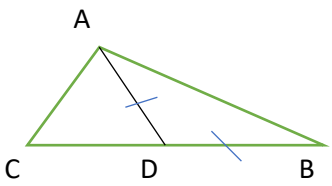
   A.　B.　C.　D.



10. 在图中， AD = BD， < ADB= 140°， < ACD= 68°， 求< BAC

    From the diagram AD = BD， < ADB= 140°， < ACD= 68°， find < BAC

    A. 72°　B.102°　C.92°　D.112°



11. 下列哪一项是 3，4 和 6 的最低公倍数?
Which of the following is a common multiple of 3,4 and 6?
A. 18 B.30 C.42 D.48

12. 杰西在从城市 A 驾驶 200 公里的旅程车到城市 B.如果他在前 120 公里开了 60 公里/小时的速度，其余的旅程减少了 1/3 的车速。求到她在整个旅程的时间。
Jessie was driving 200km journey car from city A to city B. If he drove 60km/h for the first 120km and decreased $\frac{1}{3}$ times of the car speed for the rest journey. Find the total time he spent for the whole journey.
A. 2hours B.3 hours C.4 hours D.5 hours

13. 计算$3-\frac{3}{3-\frac{6}{5+6}}$
Calculate $3-\frac{3}{3-\frac{6}{5+6}}$
A. $\frac{9}{16}$ B. $\frac{81}{11}$ C. $\frac{11}{81}$ D. $\frac{16}{9}$

14. 求 0.74 x 0.4 数值，并把答案进至一个单位数
The value of 0.74 x 0.4 , correct to one decimal place is
A. 0.2 B. 0.3 C.2.9 D.3

15. 莉莉已经向 Bank K 贷款 8000 令吉，付了贷款总额达到 8400 令吉，为期 4 个月，求 Bank K 收取年度单利息。
Lily had a loan RM 8000 with Bank K and paid the loan up to total RM 8400 for 4 months, find the annual simple interest charged by Bank K
A. 0.05% B.1.2% C.5% D.15%

16. 计算 2(-8+5) -3(7-12)
Calculate 2(-8+5) -3(7-12)
A. -9 B.-15 C.9 D.41

17. 在$8r-3+(-s)$公式中含有多少个代数?
How many terms are there in the algebraic expression $8r-3+(-s)$
A. 1 B.2 C.3 D.4

18. 因式分解$100a^2-36(b-c)^2$
Factorize $100a^2-36(b-c)^2$
A. $(10a+6b+6c)(10a-6b-6c)$ B. $(10a+6b+6c)(10a-6b+6c)$
C. $(10a+6b-6c)(10a-6b+6c)$ D. $(10a+6b-6c)(10a-6b-6c)$

19.化简 $\frac{a^2-3a+1}{2(a-1)^2}$
Simplify $\frac{a^2-3a+1}{2(a-1)^2}$
A. $\frac{a^2-3a+1}{a^2-4a+2}$ B. $\frac{a^2-3a+1}{(a-1)^2}$ C. $\frac{2a-1}{2(a-1)}$ D. $\frac{2a-1}{2(a-2)}$

20.已知$(5x-45)^2+10=10$，求 x 的值

Given $(5x-45)^2+10=10$, *find the value of x*

A. x = -45　　B. x = -9　　C. x = 9　　D. x = 45

21.解此方程式$7x^2-15x+2=0$

Solve the equation $7x^2-15x+2=0$

A. $x=-\frac{1}{7},-2$　　B. $x=\frac{1}{7},2$　　C. $x=-\frac{1}{7},2$　　D. $x=2,7$

22.若$3x^2+px+q=0$的解为 x = -4 和 x = $\frac{2}{3}$，求 p 与 q

If the x = -4 and x = $\frac{2}{3}$ *are the solutions of* $3x^2+px+q=0$,*find the values of p and q*

A. $-4,\frac{2}{3}$　　B. $\frac{2}{3},-4$　　C.10, -8　　D. -8, 10

23. 假设 x 和 y 是整数，而$-2<x\leq 2$和$-7\leq y<-2$, 求$x-\frac{1}{y^2}$的最大值

Given that x and y are integer, $-2<x\leq 2$ *and* $-7\leq y<-2$, *find the largest value of* $x-\frac{1}{y^2}$

A. $\frac{1}{4}$　　B. $\frac{7}{4}$　　C. $\frac{49}{97}$　　D. $\frac{97}{49}$

24.以 a 表示 $t=\frac{\sqrt{a-1}}{2}$

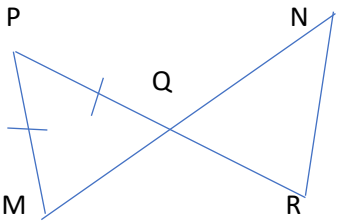
Express $t=\frac{\sqrt{a-1}}{2}$ *as subject of a*

A. $2t^2$　　B.$3t^2-1$　　C.$4t^2+1$　　D.$(2t+1)^2$

25.如图， PQR 和 MNQ 为直线， <P=50°， <N =30°， R=x °，求 x 的值

In Diagram, PQR and MNQ are straight lines. <P=50 °, <N =30 °, R=x °,

Find the value of x



A. 80°　　B.85°　　C.90°　　D.95°

26. 化简$(2x+a)^2-2(2x+a)(2x-a)+(2x-a)^2$

Simplify $(2x+a)^2-2(2x+a)(2x-a)+(2x-a)^2$

A.0　　B.$-4ax$　　C.$-4x^2$　　D.$4a^2$

27.下列多项式的乘法，何者能用平方差公式计算?

Which of the following polynomial, can be calculated using completing the square?

A.$(a+b)(b-a)$　　B.$(p+q)(p-r)$　　C.$(x+y)(x+y)$　　D.$(k-l)(k-l)$

28.计算 203×197

Calculate 203×197

A. 39994　　B.39991　　C.30007　　D.30001

29.若$x-y=10, x^2+y^2=140$,则 xy 之值是

Given $x-y=10, x^2+y^2=140$, *find value of xy*

A. 50　　B.40　　C.30　　D.20

30.计算$(-a^3)^2$

Calculate $(-a^3)^2$

A. $-a^5$　　B. a^5　　C. $-a^6$　　D. a^6

31. 下列正确的是

Which of the following is correct?

A. $3y^2 \cdot y^3 = 3y^6$　　B.$5x^4 - x^2 = 4x^2$

C.$(2a^2)^3 \cdot (-ab) = -8a^7b$　　D.$2m^2 \div 2m^2 = 0$

32. 若$(x+2)(x-1)=x^2+mx+n$，则$m+n=$?

Given $(x+2)(x-1)=x^2+mx+n$，*find* $m+n=$?

A. -1　　B.1　　C.-2　　D.2

33. 计算$(x-y)(-y-x)$

Calculate $(x-y)(-y-x)$

A. $-x^2+y^2$　　B. $-x^2-y^2$　　C. x^2+y^2　　D. x^2-y^2

34. 若$23x^2-4x+k$能被$x+1$整除，则 k =?

If $23x^2-4x+k$ *can be divided by* $x+1$, *find k =?*

A. -1　　B.1　　C.-27　　D.27

35. 展开 $(x^2-3)^2$

Expand $(x^2-3)^2$

A. x^2+6x+9　　B. x^2-6x+9　　C. x^4+6x-9　　D. x^4-6x^2+9

36. 化简$(x+2)^2-(2x-1)^2$后，可得常数项为多少？

Simplify $(x+2)^2-(2x-1)^2$*, find the constant*

A. -3　　B.1　　C.3　　D.5

37.下列各式因式分解中，正确的是

From the following factorizations, which is correct?

A. $4x-2x^2-2=-2(x-1)^2$

B. $x^2-y^2-x+y=(x+y)(x-y-1)$

C. $1-\frac{1}{4}x^2=\frac{1}{4}(x+2)(x-2)$

D. $(x-y)^3-(y-x)=(x-y)(x-y+1)(x-y-1)$

38. 因式分解x^4-1

Factorize x^4-1

A. $(x^2-1)(x^2+1)$　　B. $(x+1)^2(x-1)^2$

C. $(x-1)(x+1)(x^2+1)$　　D. $(x-1)(x+1)^3$

39.下列哪几项的两个式子的最高公因式(HCF)为$x+2$?

Which of the following have HCF of $x+2$

I. $3x+6, x^2+4$　　II. $3x^2-12, x^2+x-2$

III. x^2-4, x^2-x-6　　IV. $x^2+4x+4, x^2+3x-10$

A.I,II　　B.II, III　　C.I, II, III　　D.II, III, IV

40. 若$(4x-3)(3x+4)=ax^2+bx+c$，则下列何者正确？

If $(4x-3)(3x+4)=ax^2+bx+c$*, which of the following is correct?*

A. a=9　　B.b=0　　C. c = -12　　D. a+b+c = 8

41. 化简$\frac{(3ab^2)(4cd^2)}{2cb^2}$

Simplify $\frac{(3ab^2)(4cd^2)}{2cb^2}$

A. $6ab^2$　　B. $6ad^2$　　C. $3ab^2$　　D. $3acd^2$

42. 化简$\frac{24x^2}{72y} \div \frac{3}{y^2}$

Simplify $\frac{24x^2}{72y} \div \frac{3}{y^2}$

A. $\frac{x^2}{y^3}$　　B.$\frac{1}{9}x^2y$　　C.$\frac{x^2}{16y^3}$　　D.$\frac{8}{9}xy$

43. 化简$\frac{ab^2-a^2b}{a-b}$

Simplify $\frac{ab^2-a^2b}{a-b}$

A.-ab　　B.ab　　C.a-b　　D.a+b

44.计算$\frac{y+2}{6y} - \frac{3-y}{3y}$

Calculate $\frac{y+2}{6y} - \frac{3-y}{3y}$

A. $\frac{1}{3}$　　B. $\frac{2+y}{6y}$　　C. $\frac{-5y-4}{6y}$　　D. $\frac{3y-4}{6y}$

45. 当x为何值时，将令分式$\frac{x-3}{2x-2}$无意义？

What value of x should be to make the fraction $\frac{x-3}{2x-2}$ *meaningless?*

A. 0　　B.1　　C.2　　D.3

46.化简$\frac{(4ab^2)(4cd^2)}{2cb^2}$

Simplify $\frac{(4ab^2)(4cd^2)}{2cb^2}$

A. $8ab^2$　　B. $8acd^2$　　C. $8ad^2$　　D. $16ac^2$

47.化简$\frac{6ab}{5c} \div \frac{3a}{10c^2}$

Simplify $\frac{6ab}{5c} \div \frac{3a}{10c^2}$

A. $2ab$　　B. $2bc$　　C. $4ac$　　D. $4bc$

48.化简$\frac{ab^2-a^2b}{a-b}$

Simplify $\frac{ab^2-a^2b}{a-b}$

A. $-ab$　　B. ab　　C. $a-b$　　D. $a+b$

49.求分式方程$\frac{2}{x}+3=1$的解

Solve equation $\frac{2}{x}+3=1$

A.-2　　B.-1　　C.$\frac{1}{2}$　　D.1

50.$\frac{y+2}{6y}-\frac{2-y}{2y}=$

A. $\frac{1}{y}$　　B. $\frac{2}{y}$　　C. $\frac{2(y-1)}{3y}$　　D. $\frac{2-2y}{3y}$

51. 问$-2<x\leq 8$中有几个整数解？

How many integers are there between $-2<x\leq 8$*?*

A. 7　　B.8　　C.9　　D.10

52. 当a为什么值时，不等式$3-2a<1$成立。

What value should a be for inequality $3-2a<1$

A. 2　　B.-1　　C.0　　D.1

53.如果$6-\frac{3x}{2}\leq 4$，求x的最小整数值

If $6-\frac{3x}{2}\leq 4$*, find the smallest value of x*

A. 1　　B.2　　C.3　　D.4

54.若 x 和 y 为整数，则 $2<x\leq 6,-1<y<4$，求$3x-2y$的最大值

If x and y are integers, $2<x\leq 6,-1<y<4$*, find the largest value of* $3x-2y$

A. 12　　B.14　　C.16　　D.18

55.已知$4y-1<-9$及$1-2y>-3$，求 y 的取值范围

Given $4y-1<-9$ *and* $1-2y>-3$*, find range of y*

A. $y<2$　　B. $y<1$　　C. $y<-2$　　D. $y<-1$

56.已知两点 P(-1,-1)和 Q(-4,-4)，求 PQ 的长度

Given two points P(-1,-1) and Q(-4,-4), find the length of PQ

A. $2\sqrt{2}$　　B. $3\sqrt{2}$　　C. $4\sqrt{2}$　　D. $5\sqrt{2}$

57.长方形的长为 12cm,对角线为 15cm,求宽

Given the length of a rectangle is 12cm, diagonal is 15 cm, find the width of the rectangle.

A. 6cm　　B.7cm　　C.8cm　　D.9cm

58.求原点与点(5,12)之间的距离

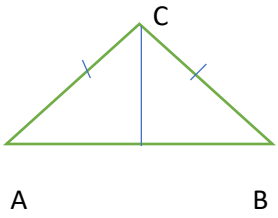
Find the distance between point (5,12) and the origin

A. 13　　B.14　　C.15　　D.16

59.如图， AB=8cm, BC = 5cm,求 d

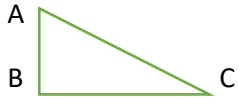
From the diagram, AB=8cm, BC = 5cm, find d

A. 3cm　　B. $\sqrt{3}$cm　　C.2cm　　D. $\sqrt{2}$cm



60.如图， AB =1cm, AC=2cm, 求 BC 的长

From the diagram, AB =1cm, AC=2cm,find the length of BC



A. $\sqrt{3}$cm　　B. $\sqrt{5}$cm　　C. $\sqrt{6}$cm　　D. $\sqrt{7}$cm