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**徐州市体育运动学校2022-2023学年度 第一学期 期末考试**

学号 班级 姓名

…………………………………………………………………密………………………封………………………线………………………………………………

**九年级数学试卷**

**（考试时间：90分钟 满分：140分）**

1. 单选题(下面各题的选择中只有一个是符合题目要求的，请将答案的代号填在相应的题号下面。每题3分，共计45分)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 题号 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 答案 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1、某校射击队从甲、乙、丙、丁四人中选拔一人参加市运动会射击比赛，在选拔比赛中，每人射击10次，他们10次成绩的平均数及方差如下表所示：

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 甲 | 乙 | 丙 | 丁 |
| 平均数/环 | 9.5 | 9.5 | 9.5 | 9.5 |
| 方差/环2 | 5.1 | 4.7 | 4.5 | 5.1 |

请你根据表中数据选一人参加比赛，最合适的人选是（   ）

A.甲   B.乙   C.丙   D.丁

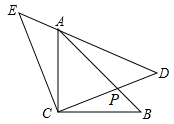
2、方程 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmrow%3E%3Cmo%3E%28%3C%2Fmo%3E%3Cmrow%3E%3Cmtext%3Ek%3C%2Fmtext%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmtext%3E1%3C%2Fmtext%3E%3C%2Fmrow%3E%3Cmo%3E%29%3C%2Fmo%3E%3C%2Fmrow%3E%3Cmsup%3E%3Cmtext%3Ex%3C%2Fmtext%3E%3Cmtext%3E2%3C%2Fmtext%3E%3C%2Fmsup%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmsqrt%3E%3Cmrow%3E%3Cmtext%3E1%3C%2Fmtext%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmtext%3Ek%3C%2Fmtext%3E%3C%2Fmrow%3E%3C%2Fmsqrt%3E%3Cmtext%3Ex%2B%3C%2Fmtext%3E%3Cmfrac%3E%3Cmtext%3E1%3C%2Fmtext%3E%3Cmtext%3E4%3C%2Fmtext%3E%3C%2Fmfrac%3E%3Cmtext%3E%3D0%3C%2Fmtext%3E%3C%2Fmrow%3E%3C%2Fmath%3E有两个实数根，则k的取值范围是（ ）．

A.k≥1   B.k≤1   C.k>1   D.k<1

3、关于x的一元二次方程（a﹣1）x2+x+a2﹣1=0的一个根是0，则a的值是（　　）

A.-1   B.1   C.1或﹣1   D.﹣1或0

4、如图， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%96%B3%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E和 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%96%B3%3C%2Fmo%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E是等腰直角三角形， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%96%B3%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E的顶点 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3EA%3C%2Fmi%3E%3C%2Fmath%3E在 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%96%B3%3C%2Fmo%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E的斜边上，若 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmsqrt%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsqrt%3E%3C%2Fmrow%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmsqrt%3E%3Cmn%3E6%3C%2Fmn%3E%3C%2Fmsqrt%3E%3C%2Fmrow%3E%3C%2Fmath%3E，连接 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E交 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E于点 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3EP%3C%2Fmi%3E%3C%2Fmath%3E，则下列说法：① https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3EA%3C%2Fmi%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3EC%3C%2Fmi%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3ED%3C%2Fmi%3E%3C%2Fmath%3E四点在同一圆上；② https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%88%A0%3C%2Fmo%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmo%3E%E2%88%A0%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E30%3C%2Fmn%3E%3Cmo%3E%C2%B0%3C%2Fmo%3E%3C%2Fmrow%3E%3C%2Fmath%3E；③ https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E；④图中有相似三角形共有4对；⑤ https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EP%3C%2Fmi%3E%3Cmo%3E%E2%8B%85%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmo%3E%E2%8B%85%3C%2Fmo%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmi%3EP%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E，正确的个数为（   ）

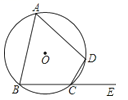


A.2个   B.3个   C.4个   D.5个

5、下列关于 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3Ex%3C%2Fmi%3E%3C%2Fmath%3E的方程中，一定是一元二次方程的为 (      )

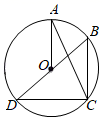
A. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3Ea%3C%2Fmi%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmi%3Eb%3C%2Fmi%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmi%3Ec%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E0%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E   B. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmsup%3E%3Cmrow%3E%3Cmo+stretchy%3D%22false%22%3E%28%3C%2Fmo%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmn%3E3%3C%2Fmn%3E%3Cmo+stretchy%3D%22false%22%3E%29%3C%2Fmo%3E%3C%2Fmrow%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3C%2Fmrow%3E%3C%2Fmath%3E   C. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmfrac%3E%3Cmn%3E3%3C%2Fmn%3E%3Cmi%3Ex%3C%2Fmi%3E%3C%2Fmfrac%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmn%3E5%3C%2Fmn%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E0%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E   D. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E0%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E

6、如图，四边形ABCD是⊙O的内接四边形，∠DAB与∠DCE的关系是（　　）



A.相等   B.互余   C.互补   D.无法确定

7、如图，点A、B、C在⊙O上，BC https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmtext%3E%2F%2F%3C%2Fmtext%3E%3C%2Fmrow%3E%3C%2Fmath%3EOA，连接BO并延长，交⊙O于点D，连接AC，DC.若∠A＝25°，则∠D的大小为（   ）



A.25°   B.30°   C.40°   D.50°

8、下列关于x的方程中，一定是一元二次方程的为（   ）

A.ax 2+bx+c=0   B. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%27http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%27%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3C%2Fmrow%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E+ https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%27http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%27%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmi%3Ex%3C%2Fmi%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E=2   C.x 2+2x=y 2﹣1   D.3（x+1） 2=2（x+1）

9、七（1）班的6位同学在一节体育课上进行引体向上训练时，统计数据分别为7，12，10，6，9，6则这组数据的中位数是（  ）

A.6   B.7   C.8   D.9

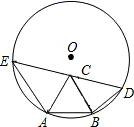
10、学校准备从甲、乙、丙、丁四个科创小组中选出一组代表学校参加青少年科技创新大赛，各组的平时成绩的平均数 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%27http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%27%3E%3Cmrow%3E%3Cmover+accent%3D%27true%27%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo+stretchy%3D%27true%27%3E%26%23x00AF%3B%3C%2Fmo%3E%3C%2Fmover%3E%3C%2Fmrow%3E%3C%2Fmath%3E（单位：分）及方差s2如表所示：

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 甲 | 乙 | 丙 | 丁 |
| https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%27http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%27%3E%3Cmrow%3E%3Cmover+accent%3D%27true%27%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo+stretchy%3D%27true%27%3E%26%23x00AF%3B%3C%2Fmo%3E%3C%2Fmover%3E%3C%2Fmrow%3E%3C%2Fmath%3E | 7 | 8 | 8 | 7 |
| s2 | 1 | 1.2 | 1 | 1.8 |

如果要选出一个成绩较好且状态稳定的组去参赛，那么应选的组是（   ）

A.甲   B.乙   C.丙   D.丁

11、已知 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E是半径为1的 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%8A%99%3C%2Fmo%3E%3Cmi%3EO%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E的一条弦，且 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3Ea%3C%2Fmi%3E%3Cmo%3E%26lt%3B%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E，以 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E为一边在 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%8A%99%3C%2Fmo%3E%3Cmi%3EO%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E内作等边三角形 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E，D为 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%8A%99%3C%2Fmo%3E%3Cmi%3EO%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E上不同于点A的一点，且 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3Ea%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E的延长线交 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%8A%99%3C%2Fmo%3E%3Cmi%3EO%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E于点E，则 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E的长为（   ）



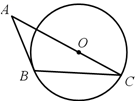
A. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmfrac%3E%3Cmrow%3E%3Cmsqrt%3E%3Cmn%3E5%3C%2Fmn%3E%3C%2Fmsqrt%3E%3C%2Fmrow%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmfrac%3E%3Cmi%3Ea%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E   B.1   C. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmfrac%3E%3Cmrow%3E%3Cmsqrt%3E%3Cmn%3E3%3C%2Fmn%3E%3C%2Fmsqrt%3E%3C%2Fmrow%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmfrac%3E%3Cmi%3Ea%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E   D.a

12、如图，一枚飞镖游戏板由大小相等的小正方形格子构成.向游戏板随机投掷一枚飞镖，击中黑色区域的概率是（    ）



A. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E   B. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E3%3C%2Fmn%3E%3Cmn%3E8%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E   C. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmn%3E4%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E   D. https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmfrac%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmn%3E3%3C%2Fmn%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E

13、如图，BC是⊙O的一条弦，经过点B的切线与CO的延长线交于点A，若∠C=23°，则∠A的度数为（   ）



A.38°   B.40°   C.42°   D.44°

14、下列命题中，正确的是（　　）

A.圆心角相等，所对的弦的弦心距相等   B.三点确定一个圆   C.平分弦的直径垂直于弦，并且平分弦所对的弧   D.弦的垂直平分线必经过圆心

15、某鞋店销售同种品牌不同尺码的男鞋，采购员再次进货时，对于男鞋的尺码，他最关注的是（　　）

A.方差   B.众数   C.中位数   D.平均数

二、填空题(请将下面各题的答案填在相应的题号后面。每题4分，共计40分)

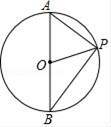
16、\_\_\_\_\_\_\_\_ 17、\_\_\_\_\_\_\_\_ 18、\_\_\_\_\_\_\_\_ 19、\_\_\_\_\_\_\_\_ 20、\_\_\_\_\_\_\_\_

21、\_\_\_\_\_\_\_\_ 22、\_\_\_\_\_\_\_\_ 23、\_\_\_\_\_\_\_\_ 24、\_\_\_\_\_\_\_\_ 25、\_\_\_\_\_\_\_\_

16、若矩形的长和宽是方程2x2-16x+m=0(0<m≤32)的两根，则矩形的周长为\_\_\_\_\_\_\_\_

17、如图，AB是⊙O的直径，点P是⊙O上的一动点，

当△AOP与△APB相似时，∠BAP等于\_\_\_\_\_\_\_\_.



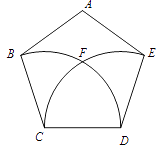
18、已知关于x的一元二次方程x2-4x+m=0有两个相等的实数根，则m=\_\_\_\_\_\_\_\_．

19、若关于 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3Ex%3C%2Fmi%3E%3C%2Fmath%3E的一元二次方程 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3Ea%3C%2Fmi%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmn%3E6%3C%2Fmn%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmn%3E4%3C%2Fmn%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E0%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E的解为 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmsub%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E1%3C%2Fmn%3E%3C%2Fmsub%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmsub%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsub%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E，则关于 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3Ey%3C%2Fmi%3E%3C%2Fmath%3E的一元二次方程 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3Ea%3C%2Fmi%3E%3Cmsup%3E%3Cmrow%3E%3Cmo+stretchy%3D%22false%22%3E%28%3C%2Fmo%3E%3Cmi%3Ey%3C%2Fmi%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmo+stretchy%3D%22false%22%3E%29%3C%2Fmo%3E%3C%2Fmrow%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmn%3E6%3C%2Fmn%3E%3Cmo+stretchy%3D%22false%22%3E%28%3C%2Fmo%3E%3Cmi%3Ey%3C%2Fmi%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3Cmo+stretchy%3D%22false%22%3E%29%3C%2Fmo%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmn%3E4%3C%2Fmn%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E0%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E的解为\_\_\_\_\_\_\_\_.

20、方程 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%E2%88%92%3C%2Fmo%3E%3Cmn%3E3%3C%2Fmn%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmn%3E0%3C%2Fmn%3E%3C%2Fmrow%3E%3C%2Fmath%3E的根为\_\_\_\_\_\_\_\_.

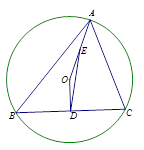
21、方程x（x﹣2）=﹣（x﹣2）的根是\_\_\_\_\_\_\_\_ ．

22、如图，正五边形ABCDE的边长为2，分别以点C、D为圆心，CD长为半径画弧，两弧交于点F，则弧BF的长为\_\_\_\_\_\_\_\_．（结果保留π）



23、某小区屋顶绿化面积为2000平方米，计划屋顶绿化面积要达到2880平方米，如果每年屋顶绿化面积的增长率相同，那么这个增长率是\_\_\_\_\_\_\_\_．

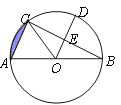
24、如图， https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%96%B3%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E内接于圆 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmi%3EO%3C%2Fmi%3E%3C%2Fmath%3E，连结 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EO%3C%2Fmi%3E%3Cmo%3E%2C%3C%2Fmo%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmo%3E%2C%3C%2Fmo%3E%3Cmi%3EE%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E分别是 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EB%3C%2Fmi%3E%3Cmi%3EC%3C%2Fmi%3E%3Cmo%3E%2C%3C%2Fmo%3E%3Cmi%3EA%3C%2Fmi%3E%3Cmi%3EO%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E的中点，且 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmi%3EO%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmi%3EO%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E，若 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%88%A0%3C%2Fmo%3E%3Cmi%3EO%3C%2Fmi%3E%3Cmi%3ED%3C%2Fmi%3E%3Cmi%3EE%3C%2Fmi%3E%3Cmo%3E%3D%3C%2Fmo%3E%3Cmsup%3E%3Cmrow%3E%3Cmn%3E10%3C%2Fmn%3E%3C%2Fmrow%3E%3Cmo%3E%C2%B0%3C%2Fmo%3E%3C%2Fmsup%3E%3C%2Fmrow%3E%3C%2Fmath%3E，则 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmrow%3E%3Cmo%3E%E2%88%A0%3C%2Fmo%3E%3Cmi%3EB%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmath%3E等于\_\_\_\_\_\_\_\_.



25、关于 x 的方程 x2+5x+m＝0 的一个根为﹣2，则另一个根是\_\_\_\_\_\_\_\_ .

三、解答题(共5题，共计55分)

26、（10分）先化简代数式 https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%27http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%27%3E%3Cmrow%3E%3Cmfrac%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%26%23x2212%3B%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3C%2Fmrow%3E%3Cmrow%3E%3Cmsup%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmn%3E2%3C%2Fmn%3E%3C%2Fmsup%3E%3Cmo%3E%2B%3C%2Fmo%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmi%3Ex%3C%2Fmi%3E%3C%2Fmrow%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E÷ https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%27http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%27%3E%3Cmrow%3E%3Cmfrac%3E%3Cmrow%3E%3Cmi%3Ex%3C%2Fmi%3E%3Cmo%3E%26%23x2212%3B%3C%2Fmo%3E%3Cmn%3E1%3C%2Fmn%3E%3C%2Fmrow%3E%3Cmi%3Ex%3C%2Fmi%3E%3C%2Fmfrac%3E%3C%2Fmrow%3E%3C%2Fmath%3E，再选择方程x2+2x﹣3=0的一个根计算该代数式的值．

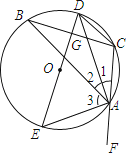
1. （10分）不透明口袋中装有1个红球和2个白球，这些球除颜色外无其他差别．从口袋中随机摸出1个球，放回搅匀，再从口袋中随机摸出1个球，用画树枝状图或列表的方法，有两次摸到的球都是白球的概率．
2. （10分）如图，AB是⊙O的直径,BC是⊙O的弦，半径OD⊥BC,垂足为E，若BC=https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmn%3E6%3C%2Fmn%3E%3Cmsqrt%3E%3Cmn%3E3%3C%2Fmn%3E%3C%2Fmsqrt%3E%3C%2Fmath%3E，OE=3；  
     
   求：（1）⊙O的半径；  
   （2）阴影部分的面积。

29、（12分）某商场经营某种品牌的玩具，购进时的单价是30元，根据市场调查：在一段时间内，销售单价是40元时，销售量是600件，而销售单价每涨1元，就会少售出10件玩具.若商场获得了10000元销售利润，求该玩具销售单价应定为多少元？

1. （13分）如图，已知△ABC内接于⊙O，AD、AE分别平分∠BAC和△BAC的外角∠BAF，且分别交圆于点D、F，连接DE，CD，DE与BC相交于点G．

（1）求证：DE是△ABC的外接圆的直径；

（2）设OG=3，CD=https://math.21cnjy.com/MathMLToImage?mml=%3Cmath+xmlns%3D%22http%3A%2F%2Fwww.w3.org%2F1998%2FMath%2FMathML%22%3E%3Cmn%3E2%3C%2Fmn%3E%3Cmsqrt%3E%3Cmn%3E5%3C%2Fmn%3E%3C%2Fmsqrt%3E%3C%2Fmath%3E ， 求⊙O的半径．



参考答案

一、单选题(共15题，共计45分)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 题号 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 答案 | C | D | A | C | D | A | C | D | C | C | B | B | D | D | B |

二、填空题(共10题，共计30分)

16、 16

17、 45°

18、 4

19、 y1=0 y2=1

20、x1=0 x2=3

21、 x1=2 x2= -1

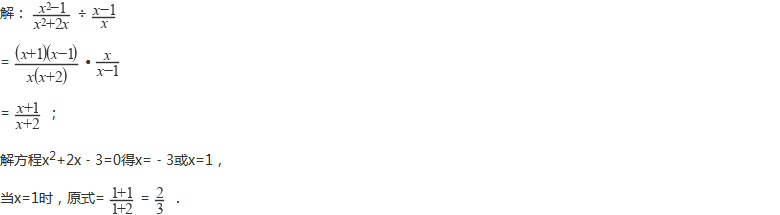
22、 http://117.139.223.109:10000/image/zujuan/tkt_cz/s1625568964761.png

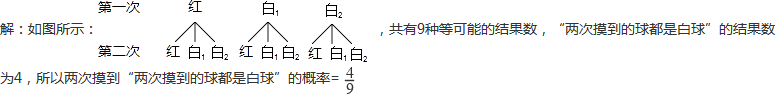
23、 20%

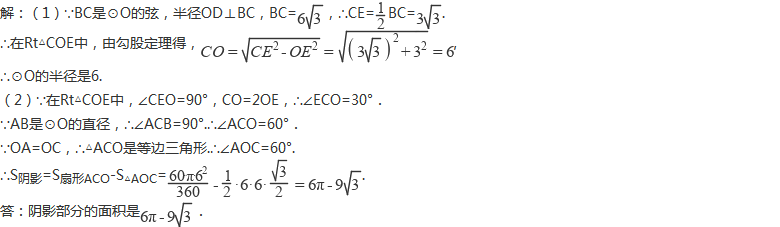
24、 50°

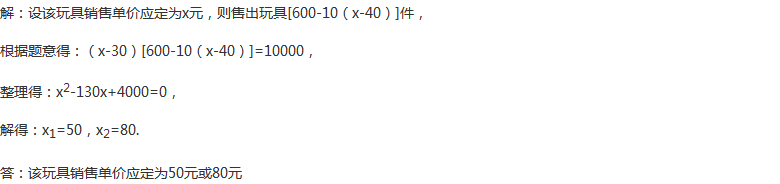
25、 -3

三、解答题(共5题，共计25分)

26、 

27、 

28、 

1. 

30