West Middle School

8th Grade Math

Ms. Courtney’s

wINTER bREAK pACKET



Student Name:

pARENT sIGNATURE:

1. Which of the following numbers is a rational number?
2. 7/8 B. 12 C. 0 D. -5
3. People spend about $4.5 X 105 at the Texas State Fair. What is the number written in standard notation?
4. 4,500,000 B. 450,000 C. $450,000,000 D. $45,000
5. About 3,000,000 people attend the State Fair of Texas each year. What is the number expressed in scientific notation.
	1. 3 x 106 b. 3 x 105 c. 3 x 107
6. Ms. Courtney tutored 5 students prior to the common assessment #2. The table below shows the grades the students made. What is the mean absolute deviation of the grades rounded to the nearest hundredths?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Grades |  |  |  |  |
| 86 | 60 | 72 | 94 | 100 |

1. 82.40 B. 22.40 C. 13.12 D. 65.60
2. The table below shows how many seats were full each week.

|  |  |
| --- | --- |
| Weeks | Seats Full |
| 1 | 80% |
| 2 | 2/3 |
| 3 | 75% |

 Which shows the weeks in order from MOST seats full to LEAST seats full?

1. Week 1, week 2, week 3 B. Week 3, week 2, week 1 C. Week 1, week 3, week 2
2. Over two years, how much more will a savings account with a simple interest rate of 4.2% yield in earnings than a savings account with a simple interest rate of 3.5% if the original balance of both accounts is $2,200.
3. $15.40 B. $30.80 C. $3,080 D. $31.98
4. Ms. Courtney wants to conduct a survey to determine the favorite activity of students in the eighth grade. Which sampling method would be a good representation of the eighth graders?
5. Survey students as they leave band class.
6. Survey five students from every eighth grade class home room class.
7. Survey a group of friends sitting together in the cafeteria at lunch.
8. Which of the choices below of transformation represents congruence (always)
	1. Reflection, dilations, translations
	2. Reflection, rotation, translations,
	3. Dilations, rotations, translations, reflections
	4. Rotation, translation
9. Which of the choices below may not always preserve congruence?
	1. Dilation
	2. Reflection, rotation, translation
	3. Dilation, reflection
	4. Translation
10. Justin charges $20 to organize/clean people house. Which number sentence can be used to fid M, the money he would make if he cleaned, h house?
11. M= 20h B. M= 20+20+h C.M= 20+h
12. The equations y=3x-6 and y=-2x-21. Which point satisfies both equations?
13. (0,1) B. (3,3) C. (-3,-15) D. (0,0)
14. The dimensions of a rectangle are shown below:

10cm

3cm

If each dimension of the rectangle were enlarged by a scale factor of 5:1, what would the area of the enlarged rectangle be?

A) 30cm2 B) 150cm2 C) 750 cm2 D) 1000 cm2

1. Alex has a list of estimated costs to attend a community college for each semester. What is the total estimated cost for Alex to attend this particular college for two years?

|  |  |
| --- | --- |
| Items | Cost |
| Tuitions and Fees | $1,300 |
| Room and Board | $2,100 |
| Books and Supplies | $800 |
| Personal Expenses | $1000 |

1. $5200 B. $10,400 C. $20,800 D. $15,600
2. President Obama lifted 4 bar bells in 82 seconds. Which of the following is an equivalent rate of lifting. (Hint…You need to use division to solve)
3. 6 bar bells in 120 seconds
4. 6 bar bells in 130 seconds
5. 10 bar bells in 215 seconds
6. 10 bar bells in 205 seconds
7. Jamie is putting new carpet on the floor in her bedroom. The carpet are one foot square. If her bedroom is 19 feet long and 12 feet wide, what is the area of her bedroom?
8. If a point is translated down 9 units, what are the new coordinates expressed as an algebraic representation?
9. (x-9, y-9)
10. (x,y-9)
11. (x-9,y)