2013 ard

	2013 319	
	2003-2004 4TH GRADE CONTEST SOLUTIONS	Answers
1.	Three years ago, I was 6, so now I'm $6 + 3 = 9$ years old.	1.
	A) 3 B) 6 C) 9 D) 18	C
2.	Product = 0, so the correct choice is D since it has 0 as a factor.	2.
	A) $10 \times 2 \times 4$ B) 200×4 C) 20×4 D) $3 \times 0 \times 5$	D
3.	Every woolly mammoth has two	3.
	tusks, so 22 woolly mammoths have $22 \times 2 = 44$ tusks.	C
	A) 11 B) 22 C) 44 D) 88	
_		
4.	$5 \times 25 \varphi = 25 \times 5 \varphi.$	4.
	A) 25 B) 50 C) 75 D) 125	A
5.	1+2+3 = (11-10)+(22-20)+(33-30) = 11+22+33-(10+20+30).	5.
	A) 30 B) 50 C) 60 D) 66	C
6.	550 < five hundred fifty-five < 560; this is midway, so round up.	6.
	A) 556 B) 560 C) 565 D) 600	В
7.	$(84 \div 84) + 84 = 1 + 84 = 85.$	7.
	A) 84 B) 85 C) 168 D) 252	В
8.	I wrote the same 12-letter message	8.
	on the blackboard 5 days in a row. In all, I wrote $12 \times 5 = 60$ letters.	D
	A) 12 B) 17 C) 26 D) 60	
_	School	
9.	$24 \times 24 = 12 \times 2 \times 12 \times 2 = 12 \times 12 \times 4$. A) 2 B) 4 C) 12 D) 144	9. B
(100mm)		
10.	(9+99+999) - (9+999) = (9-9) + 99 + (999-999) = 99.	10.
	A) 1098 B) 999 C) 108 D) 99	D
11.	8 dozen = $8 \times 12 = 96 = 48 \times 2 = 48$ pairs = 2×24 pairs.	11.
	A) 2 B) 4 C) 8 D) 12	Α
12.	If the sum of the ones' digits is odd, then the whole sum is odd.	12.
	A) 1248 + 8421 = ***9 B) 8412 + 4812 = ****4	Α
	C) 8421 + 4821 = ****2 D) 1248 + 1284 = ***2	

Go on to the next page III 4

13.	The product of 1 and 19 is 19. The sum of 1 and 19 is 20.	13.
	A) 12 B) 17 C) 20 D) 28	C
14.	The tens' digit of 2003×2004 is the same as that of $3 \times 4 = 12$. A) 3 B) 2 C) 1 D) 0	14. C
15.	Since "i" comes after "a" in the alphabet, my name could <i>not</i> be Simba. A) Simba B) Simbo C) Simbu D) Simby	15. A
16.	36 ÷ 3 = 12 = 3×4. A) 33 B) 12 C) 6 D) 4	16. D
17.	By working for 7 days from 7 P.M. to 10 P.M., this babysitter worked 7×3 hrs. = 21 hrs. and earned $21 \times $6 = 126 . A) \$18 B) \$42 C) \$72 D) \$126	17. D
18.	$10 \times 1 \times 11 \times 1 \times 10 = 11 \times 1 \times 1 \times 10 \times 10$	18. D
19.	Of the numbers 1, 2, 3, 4, 5, 6, 7, 8, and 9, only 3, 6, and 9 are divisible by 3. These are the 3 that are divisible by 3. A) 1 B) 2 C) 3 D) 4	19. C
20.	The taxi began with 6 kids. After 3 stops, 3 kids got in the taxi and 6 got out. After 3 stops, there were 6+3-6 kids = 3 kids in the taxi. A) 3 B) 6 C) 9 D) 12	20.
21.	4×4×4 = 64 = 8×8.	21. B
22.	A) 6×6 B) 8×8 C) 12×12 D) 16×16 (The # of mins. in 1 hr.) – (the # of hrs. in 1 day) = $60-24=36$. This is 24 less than the number of secs. in 1 min., which is 60. A) 36 less than B) 24 less than C) 24 more than D) 36 more than	22. B
23.	In a circle, 1 diameter = 2 radii; so, $4 \times$ diameter = $8 \times$ radius. A) 2 B) π C) 8 D) 16	23. C

2013 3 A GRADE CONTEST SOLUTIONS	Inswers
	24. B
A) 26 B) 34 C) 36 D) 52	25.
25. Multiples of 4 are 4,8,,92, 96. To count the numbers on this list, divide 99 by 4 and drop the remainder. der. Finally, 99÷4 = 24+ remainder.	С
A) 20 B) 21 C) 24 D) 25 26. If the sum of three of the four sides of the square is 18, the length of each side of the square is 18, the length of the square is 18,	26. B
is $18 \div 3 = 6$. The perimeter is $4 \times 6 = 23$ A) 6 B) 24 C) 36 D) 72	27.
27. Each number is its own largest even divisor. Pick the largest #. A) 888 B) 6666 C) 44 444 D) 222 222	D
28. Of 7 tuba players, 4 play in the orchestra and 7 play in the marching band. Every tuba player plays in the band, so 4 tuba players play in both the orchestra and the band.	28.
A) 4 B) 6 C) 7 D) 11 29. The number of ones used in each product is shown below. A) 80 too small B) $88 = 2+2+2+2+5+(75\times1)$; least possible # C) $90 = 4+4+5+(77\times1)$ D) $96 = 8+10+(78\times1)$	29. A
30. There are 9 triangles whose sides have length 1. There are 3 triangles whose sides have length 2. There is 1 triangle whose sides have length 3. There are a total of 9 + 3 + 1 = 13 triangles.	30. D
A) 10 B) 11 C) 12 D) 13	st den l

The end of the contest 🕰 4

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