

26. Craig the Croc cried crocodile tears at exactly 15% of the movies he saw last year, but saw 34 movies that did not make him cry. How many of the movies that he saw made him cry?
A) 6 B) 12 C) 18 D) 40
27. If two consecutive whole numbers have a different number of digits, then their product must be a multiple of
A) 4 B) 11 C) 15 D) 100
28. My bookcase has 5 shelves, and each shelf has the same number of books on it. If the books have a total of 18000 pages, and there are an average of 360 pages per book, how many books are on each shelf?
A) 10 B) 50 C) 55 D) 250
29. $2^3 \times 2^5 \times 2^7 \times 2^{11} =$
A) 4^{13} B) 16^{26} C) 2^{1155} D) 16^{1155}
30. A wall is painted with vertical stripes of red, orange, yellow, green, blue, indigo, and violet in that order, and then the pattern is repeated 50 times. How many of the first 100 stripes are orange?
A) 7 B) 12 C) 14 D) 15
31. (the # of sides of a trapezoid) \times (the # of sides of a rhombus) + (the # of sides of a hexagon) \times (the # of sides of a triangle) =
A) 24 B) 28 C) 34 D) 66
32. The hands of a circular clock form a ? angle at 6:15 P.M.
A) 82.5° B) 90° C) 97.5° D) 270°
33. At Terrier Teahouse, each blend contains 2 different teas. There are 6 herbal teas and 4 teas that are not herbal on the menu. If at least 1 tea in a blend must be herbal, ? different blends are possible.
A) 24 B) 27 C) 39 D) 54
34. It takes 36 workers 48 hours to paint a ship. Working at the same rate, how many hours would 24 workers need to paint the ship?
A) 32 B) 56 C) 64 D) 72
35. The product of all whole numbers from 1 through 35 is divisible by each of the following *except*
A) 2^{18} B) $7^6 \times 3$ C) $3^{15} \times 5$ D) $10^8 \times 7$



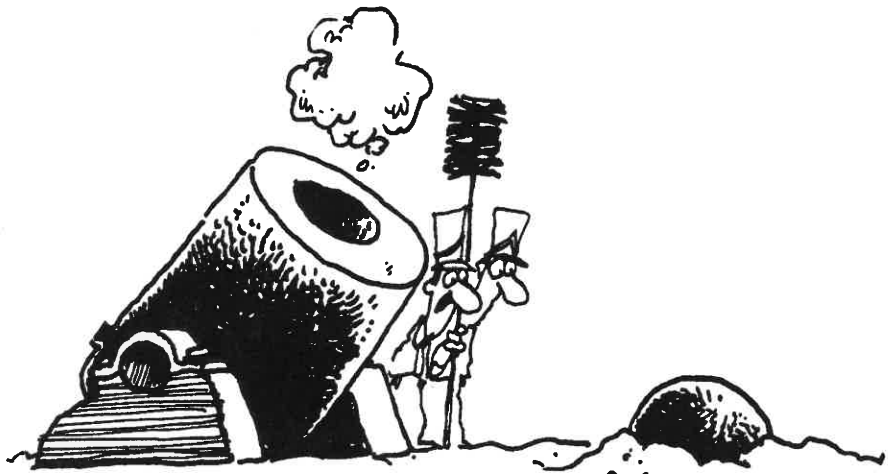
2013-2014 Annual 6th Grade Contest

Tuesday, February 18 or 25, 2014

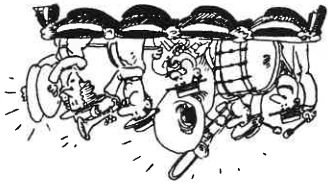
6

Instructions

- **Time** Do not open this booklet until you are told by your teacher to begin. You might be *unable* to finish all 35 questions in the 30 minutes allowed.
- **Scores** Please remember that *this is a contest, and not a test*—there is no “passing” or “failing” score. Few students score as high as 28 points (80% correct). Students with half that, 14 points, *should be commended!*
- **Format, Point Value, & Eligibility** Every answer is an A, B, C, or D. Write answers in the *Answers* column. A correct answer is worth 1 point. Unanswered questions get no credit. You **may** use a calculator.



1.	The band's trombone plays 2013 notes, the trumpet plays 2014 notes, and the tuba plays 218 notes. That's a total of $\frac{?}{?}$ notes. A) 6245 B) 6045 C) 4245 D) 645
2.	$(50 - 20) + (70 - 40) + (90 - 60) = 3 \times \frac{?}{?}$ A) 10 B) 30 C) 90 D) 270
3.	The remainder when $(999\,999\,999 + 666\,666 + 333 + 1)$ is divided by 3 is A) 0 B) 1 C) 2 D) 3
4.	All together, one dollar and one quarter and one dime and one nickel have the same value as $\frac{?}{?}$ nickels. A) 140 B) 70 C) 35 D) 28
5.	$20 - 5 \times 2 = 2 \times \frac{?}{?}$ A) 5 B) 15 C) 25 D) 30
6.	My vacation will start three weeks and two days after yesterday. If today is Tuesday, my vacation will start on what day? A) Monday B) Tuesday C) Wednesday D) Thursday
7.	$4 \times 6 \times 8 \times 10 = 2 \times 3 \times 4 \times 5 \times \frac{?}{?}$ A) 2 B) 6 C) 8 D) 16
8.	Which one does <i>not</i> equal 20 when rounded to the nearest 10? A) 18.26 B) 21.42 C) 24.68 D) 25.12
9.	When I split the cost of a video game equally with 4 friends, we each pay \$12.00. How much more do each of us pay if I split the cost equally with only 3 friends? A) \$3.00 B) \$4.00 C) \$15.00 D) \$16.00
10.	The number halfway between 4 and 26 is A) 11 B) 13 C) 15 D) 17
11.	At 5:00 P.M. on a Friday, Hal got locked in the vault. He was in there for 5040 minutes before it opened. On what day did it open? A) Sunday B) Monday C) Tuesday D) Wednesday
12.	$1\,000\,000 =$ A) 10^5 B) 10^6 C) 10^7 D) 10^8
13.	150% of 20 = 200% of A) 15 B) 25 C) 30 D) 40



14.	The new experimental cannon fired its cannonball a total distance of 2000 mm. That is the same as a distance of $\frac{?}{?}$ cm. A) 20000 B) 200 C) 20 D) 2
15.	Four 2×8 rectangles have a total area equal to that of a square of perimeter A) 8 B) 16 C) 32 D) 64
16.	The sum of the prime factors of 231 is A) 21 B) 22 C) 152 D) 383
17.	I see a km marker at the end of each km I drive. The markers are numbered consecutively from 1 through 100. How many markers are more than 30 km from the marker numbered 50? A) 38 B) 39 C) 40 D) 41
18.	(ten-thousands digit of 123456789) \times (hundreds digit of 87654321) = A) 8 B) 10 C) 12 D) 15
19.	Of 60 people at a school board meeting, 24 are men. The ratio of women to men at the meeting is A) 3:2 B) 2:3 C) 11:6 D) 6:11
20.	The sum of all the positive integer divisors of 18 is A) 18 B) 20 C) 38 D) 39
21.	I rode my bicycle a total of 450 km in 15 hours. At this rate I would travel $\frac{?}{?}$ km in 30 minutes. A) 15 B) 30 C) 60 D) 90
22.	In 8 years Mac's grandmother will be twice as old as she was 29 years ago. How old will Mac's grandmother be in 4 years? A) 62 B) 66 C) 70 D) 74
23.	If the sum of 7 consecutive integers is 63, the sum of the largest and the smallest of the 7 integers is A) 18 B) 24 C) 42 D) 64
24.	$\sqrt{3^2 + 4^2} =$ A) 5^2 B) 3×4 C) $3 + 4$ D) 5
25.	Of the first 100 positive whole numbers, the ratio of the number of multiples of 8 to the number of multiples of 4 is A) 2:1 B) 12:25 C) 13:25 D) 1:2

