# 2006 Grade Four Competition – Full Solutions
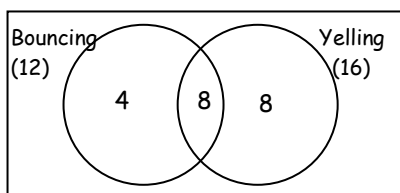
1) D 7x1=7 , 7 is the larger number

2) B Two hours after 10:30 pm on Thursday is 12:30 am on Friday.

3) A 15x10=150 cm which equals 1.5 metres

4) C All 26 did not fly away (or stayed), BUT 12 flew away. That leaves 14

5) D There are 25 prime numbers below 100. The 25th prime number is 97.

6) C A combination of two quarters (50¢) and one dime (10¢) will make 60¢. None of the other options can be made with exactly three quarters and/or dimes.

7) B (last page read) – (pages not read) = pages read
62-44=18 pages read    He read 18 pages.

8) C There are 8 halves in 4 plus 1 more half = 9 halves.

9) C If all of the flowers had 3 petals, 60 petals would be counted. There are 10 extra petals. Give 5 flowers each two more petals. 20-5=15 flowers with only 3 petals.

10) B 1 to any exponent will equal 1. 1+1+1=3

11) A (3 x ½ of 8) - 2 = 10    George eats 10 kg.

12) C

13) C $$\frac{1}{4}+\frac{1}{4}=\frac{2}{4}=\frac{1}{2}$$

14) D 165÷3=55    165÷5=33    165÷11=15

15) A The anchor date is the 10th of May
10-3+6+7+3=23rd of May is my sister's birthday

16) D



Total:25
8+8+4=20 children bouncing and yelling
25-20=5 doing neither

17) C The layers represent the perfect squares of 1, 2, 3, 4 and 5. The next layer will need $6^2$ or 36 cubes.

18) B There are fifteen 4's: 4, 14, 24, 34, 40, 41, 42, 43, **44**, 45, 46, 47, 48, 48

19) C The pattern consists of consecutive natural numbers (9 10), (11 12), (13 14), (15 16), (17 18): the next number will be 1920

20) C Three tiles will fit along each wall in the room. 3x3=9

21) B The pattern of triangles is made up of prime numbers. The next prime number is 11.

22) D 78x3=234  marks on the 1st three tests, and 82x4=328 marks total for all four tests, or an extra 328-234=94  marks on the 4th test, therefore, 94% is needed.

23) B (5 x 6 x 7) x 8 = 210 x ___
5 x 6 x 7 = 210 or 21 x 10

24) A A square with a perimeter of 20 has a side length of 5 cm.
The circle would have a diameter of 5 cm and a radius of 2.5 cm.

25) D Total time is 45 seconds x 10 = 450 seconds. This is 7 minutes, 30 seconds. ( $450 \div 60 = 7$ minutes with 30 seconds left over.)

26) B 95-75=20 There are 20 starfish.
75-20=55  There are 55 crabs.

27) A Numerator multiplied by 2. Denominator multiple of 3. $\frac{2}{3},\frac{4}{6},\frac{8}{9},\frac{16}{12},\frac{32}{15},...$     $1\frac{1}{3}=\frac{4}{3}=\frac{16}{12}$ and $\frac{32}{15}=2\frac{2}{15}$

28) C There are thirteen one-letter , four 6-letter squares and one 13-letter square; for a total of 18 squares.

29) B If $\frac{4}{5}$ is 24 then $\frac{1}{5}$ is $24 \div 4 = 6$. The blue socks are $\frac{1}{5}$ of the total so there are 6 socks.

30) D If the pop is worth 1 unit, then the cookie is worth 2 units and the hotdog 4 units. There are a total of 7 units for $14. Each unit is $2 each. Because each hotdog is 4 units, then 2 hotdogs would be 8 units. The cost for 8 units is 8x$2 = $16.