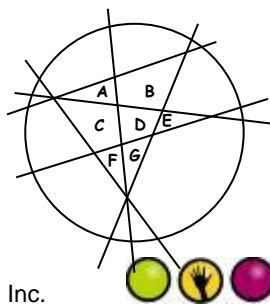# 2007 Grade Three Competition Solutions

1) **C** 10 x 9 = 90.

2) **B** The month with the fewest number of days is February.

3) **A** There are 6 faces on a cube.

4) **A** Since 0 is one of the numbers we are multiplying, the product is 0.

5) **D** 15 + 20 = 35. Since there are only 32 customers in the shop, there are 35 – 32 = 3 customers who must be getting both a perm and a haircut.

6) **C** The approximate thickness of a dime is 1 mm.

7) **C** He did not read pages 1 to 15 so you subtract those pages. 65 – 15 = 50. Happy Horse read 50 pages.

8) **A** He picked 2 dozen bananas and ate all of them **except 21**. Thus he ate 24 - 21 = 3 bananas.

9) **A** A pentagon has 5 sides and an octagon has 8 sides.

10) **D** Tines are not a unit of measurement. Tines are the "fingers" on a fork.

11) **C** Don't forget about order of operations!
$$1 \times (3 + 5) \times 4 = 1 \times 8 \times 4$$
$$= 32$$

12) **C** The smallest number is largest negative number, which is -15.5.

13) **A** There are 31 days in March and 31 x 2 = 62. Thus, Jeremy practised for 62 hours in total.

14) **C** Frank should measure the perimeter since that is the distance around the outside of the pasture.

15) **A** There are 10 whole numbers less than 10 because 0 is a whole number. (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

16) **B** There are two brothers plus 17 others. They will need 19 pieces. So, they will have to make 18 cuts.

17) **B** $19 \times 100 = 1900$
$19 \times 10 = 190$
$9 \times 10 = 90$
$1 \times 1 = 1$ $1900 + 190 + 90 + 1 = 2181$

18) **B** The first five primes are: 2, 3, 5, 7, 11. Thus, the fifth prime is 11.

19) **B** 2:30 – 3:30 is **1 hour**; 3:30 – 4:00 is ½ hour or **30 minutes**; 4:00 – 4:10 is **10 minutes**. Therefore, the movie lasted 1 hour and 40 minutes.

20) **D** Twice 111 is 2 x 111 = 222 and thrice 4 is 3 x 4 = 12. Therefore you have: 222 + 12 = 234.

21) **C** Two nickels plus two dimes is 30 cents. Thus, you need 20 more cents to have a total of 50 cents.

22) **A** 12 – 7 + 3 – 6 = 2. Judy went to the World Series on June 2nd.

23) **A** You need to get 3 x 2 = 6 marks to bring each of your previous drill scores up to the average of 28. Of course you also need 28 marks for your fourth drill. So you need to get 6 + 28 = 34 on your next drill.

24) **C** Since the first locker that doesn't exist is #2, we subtract: 60 – 2 = 58. 58 ÷ 2 = 29. There are 29 lockers.

25) **C** The factor set of $18 : \{1, 2, 3, 6, 9, 18\}$ The sum of these numbers is 39.

26) **D** When you rotate the smaller piece ¼ of a turn counter-clockwise, you can see that it is the same shape as the larger shaded-in piece.

27) **C** Since the first 13 pages are written in blue, the pages written in red ink start at page 14. There are 13 + 9 = 22 pages. Thus, pages 14 to 22 are written in red ink.

28) **B** The next term in the sequence is 16. You get the next term by adding the two previous terms.

29) **B** 40 seconds ÷ 8 intervals = 5 seconds per interval. At 5:00 there will be 4 intervals and 4 x 5 = 20 seconds.

30) **B** Don't label any of the regions enclosed by a curved line!

# of letters	"Name"	# of triangles
1	A, E, F, G	4
2	AB, CF, DE, DG, FG	5
3	ACF, BDG, CDE	3
4	CDFG	1
5	0	0
6	ABCDFG	1
	Total:	**14**