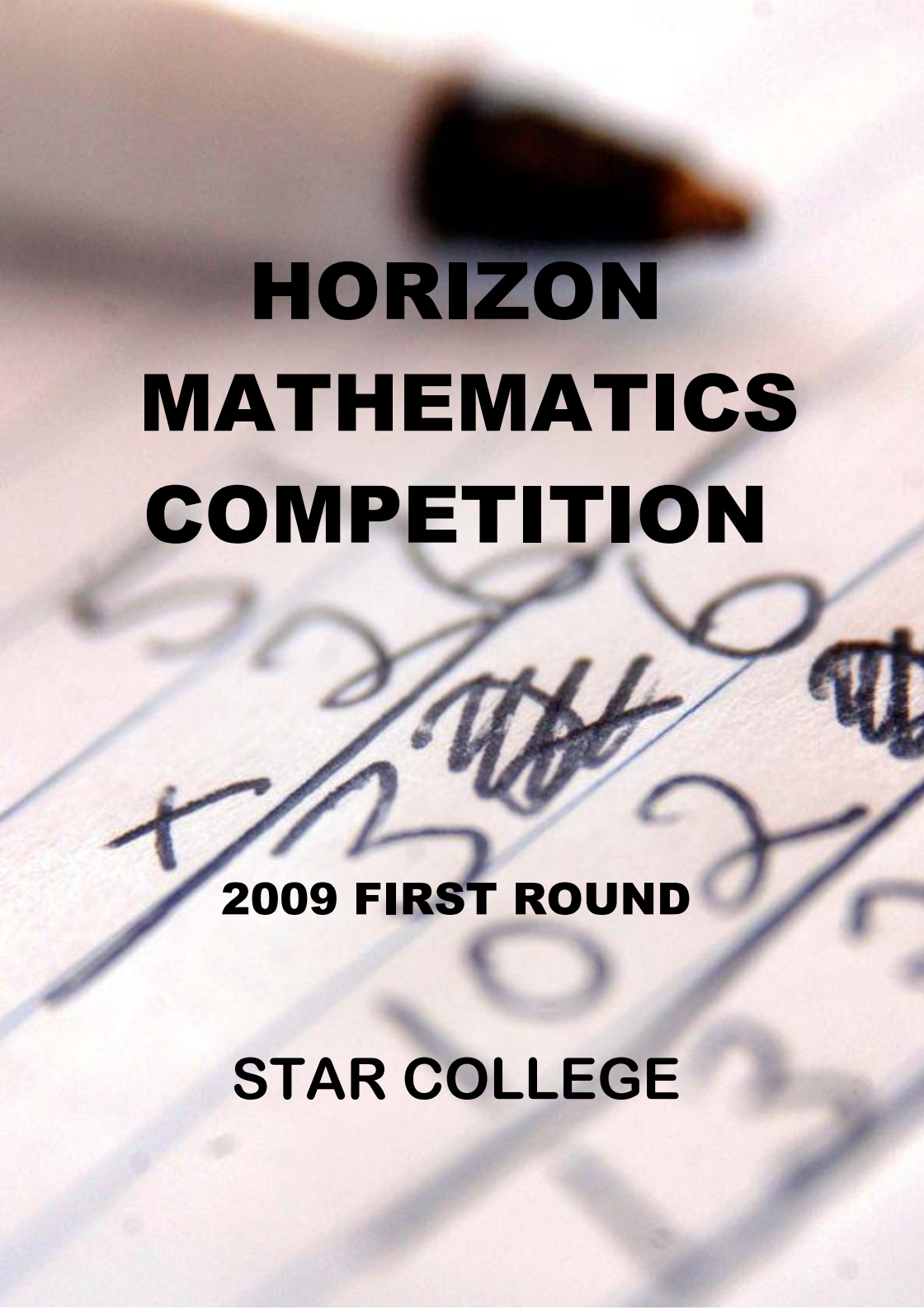


HORIZON MATHEMATICS COMPETITION

2009 FIRST ROUND

STAR COLLEGE

1. Which of the following is the greatest number?

a) 2x0x0x9 b) 2-0-0-9 c) 2+0+0+9
d) 20+0+9 e) 20x0x9

2. What is the smallest integer divisible by 3,4 and 6?

a) 8 b) 12 c) 18 d) 24 e) 36

3. $\dfrac{2009+2009+2009+2009+2009+2009}{2009+2009} = ?$

a) 4018 b) 2009 c) 3 d) $\dfrac{5}{2}$ e) 6

4. What is the result of $2009 \div (2-0-0-9) + 2 \times 0 \times 0 \times 9 = ?$

a) 2009 b) 0 c) -287 d) 287 e) 5

5. Tinyiko has 7 notes of 200 Rand,3 notes of 20 Rand and 4 coins of 5 Rand. How many Rand does Tinyiko have?

a) R1200 b) R1520 c) R1325 d) R1225 e) R1480

6. How many 2-digit whole numbers are multiple of 6 and 8?

a)2 b)3 c)4 d)5 e)6

7. 5 million equals

a)5x1000 b)50x1000 c)500x1000 d)5000x1000 e)5000x10

8. $\frac{1}{2}+\frac{3}{4}-\frac{5}{6}=?$

a) $\frac{5}{12}$ b) $\frac{-1}{12}$ c) $\frac{9}{24}$ d) $\frac{5}{16}$ e) $\frac{5}{6}$

9. My birth day is 209th day of the calendar year in….

a) May b) June c) July d) August e) March

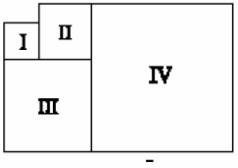
10. If Billy The Ostrich can run 75km/h, how many km can he run in 40 minutes?

a) 45 km b) 50 km c) 40 km d) 55 km e) 60km

11. The product of $\left(-\frac{3}{4}\right)\times\left(-\frac{5}{2}\right)=?$ is closest to which number?

a) 1 b) -1 c) 2 d) -2 e) 3

12. The perimeter of Square I is 12cm and the perimeter of Square II is 20cm.Figure III is also a square. What is the perimeter of Square IV?



a) 26 b) 60 c) 32 d) 64 e) 52

13. While working his bicycle Thando tried the $\frac{3}{4}$ inch wrench and it was to large.He than tried the $\frac{5}{8}$ inch wrench and it was to small. Which of the following wrench sizes should Thando try next?

a) $\frac{6}{8}$ inch b) $\frac{7}{8}$ inch c) $\frac{13}{16}$ inch d) $\frac{5}{16}$ inch e) $\frac{11}{16}$ inch

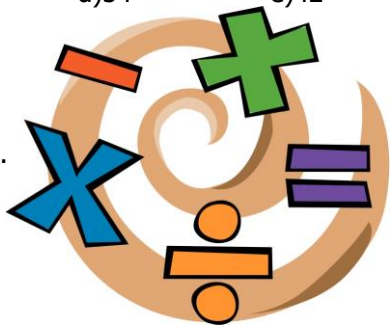
14. Which group of angles could represent the measure of the three angles of a triangle?
    a) $40^{\circ},50^{\circ},60^{\circ}$
    b) $30^{\circ},50^{\circ},60^{\circ}$
    c) $140^{\circ},10^{\circ},60^{\circ}$
    d) $100^{\circ},20^{\circ},60^{\circ}$
    e) $90^{\circ},60^{\circ},90^{\circ}$

15. Siyabonga has 24 coins. Half of the coins are R2 ,one third of the coins are R1 and the rest of the coins are 50cents. How much does Siyabonga have?

    a) 22 b)24 c)32 d)34 e)42

16. Which statement is not true?

    a) All squares have four sides.
    b) A polygon must have at least four sides.
    c) All polygons have exactly five sides.
    d) Some rectangles are squares.
    e) All rectangles are quadrilaterals.



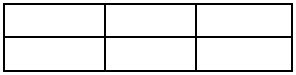
17. If $a \Delta b = a + b - 2a$ then what is the value of $(6 \Delta 8) \Delta 2$

    a) 2 b) 6 c) 3 d) 0 e) 5

18. Thabo has 120 marbels. 40% of his marbels are blue. He gives 50% of his blue marbels to his friend Reaboka. How many marbels does Thabo have after he gives some to Reaboka?

    a) 96 b) 60 c) 32 d) 64 e) 52

19. How many rectangles are the in this figure?



    a) 12 b) 10 c) 14 d) 18 e) 15

20. How much greater is the product of 7,-4 and -2 than their sum?

    a) 59 b) 45 c) 51 d) 57 e) 55