

CHRIST CHURCH FOUNDATION SCHOOL
END OF YEAR PROMOTION EXAM
JUNE 2007

FIRST FORMS

MATHEMATICS

DURATION 1 ½ HRS

NAME.....

FORM.....

This paper consists of two sections. Section A consists of ten (10) multiple choice items, **ALL** of which must be answered. **Section B** consists of structured short answer questions and questions which require full working. **Full marks may not be awarded in SECTION B, unless full working or explanation is given.**

SECTION A: [15 Marks]

1. $-9 - 6 =$
(A) -15 (B) -3
(C) 3 (D) 15
2. $\frac{5}{8}$ converted to decimal number is
(A) 0.0625 (B) 0.375
(C) 0.625 (D) 1.6
3. $6p - 7q - 5p + 4q =$
(A) $p + 3q$ (B) $-p + 3q$
(C) $-p - 3q$ (D) $p - 3q$
4. The H.C.F. of 8 and 12 is
(A) 2 (B) 4
(C) 24 (D) 96
5. $\frac{3}{5} + \frac{5}{6} =$
(A) $\frac{8}{11}$ (B) $\frac{43}{60}$
(C) $\frac{60}{43}$ (D) $\frac{8}{30}$
6. $8 \times 6 - 6 \div 2$
(A) 4 (B) 16
(C) 21 (D) 45
7. 37.4783 to 2 decimal places is
(A) 3748.83 (B) 37.00
(C) 37.48 (D) 37.47
8. $1.2 \div 0.3 =$
(A) 0.04 (B) 0.4
(C) 4 (D) 40
9. A triangle has interior angles of 40° , 40° and x° . Then $x^\circ =$
(A) 10° (B) 80°
(C) 100° (D) 280°
10. 120 % of 80 =
(A) 16 (B) 64
(C) 96 (D) 100

SECTION B: [65 Marks]

11. Calculate the exact value of the following:

(a) $\frac{5}{6} + \frac{3}{5}$

(b) $\frac{4}{7} - \frac{2}{4}$

(c) $3\frac{5}{8} \div \frac{3}{4}$

[9 Marks]

12. Using the given diagram, calculate the values for x, y and z.

(a) $x =$

(b) $y =$

(c) $z =$

[4 Marks]

13. Due to a rain delay, the World Cup Cricket final started late at 10: 55 a.m. and concluded in the dark at 6: 43 p.m.

(a) How long did the match last?

Ans: Length of match =

(b) If there was a 40minute break for lunch, how much time was actually used for playing?

Ans: Actual playing time =

[4 Marks]

14. Tahirah ran a race at house sports taking 1000 steps of 80 cm each. What distance race did she run in metres.

Ans: Distance in metres =

[2 Marks]

15. Calculate the following shopping bill for the items listed below:

4 phone cards at \$10.00 each = \$

2 pebls at \$625.00 each = \$

1 razr at \$449.99 = \$

3 sim cards at \$35.50 each = \$

Total bill = \$

[5 Marks]

16. The prefect body bought 20 packs of hamburger buns at \$2.50 per pack and 20 packs of hamburgers at \$8.00 per box. Both packs each contain 8 items per pack. The prefects then decided to sell each hamburger at \$3.50 . Calculate:

(a) The total cost of the buns and hamburgers.

(b) The total number of hamburgers sold.

(c) The total selling price of the hamburgers.

(d) The total profit made.

(e) The percentage profit they made.

[11 Marks]

- (b) The mode for this set of marks is
- (c) Calculate the angle to be used on a pie chart to represent the number of students who scored full marks.

Ans: Angle on piechart =

[9 Marks]

19. If the universal set $E = \{ 1, 2, 3, \dots, 8, 9, 10 \}$ and $P = \{ 3, 5, 7, 9 \}$ and $Q = \{ 2, 4, 5, 7 \}$ are subsets of E :

(a) Draw a Venn diagram to show the above information.

(b) List the members of the following sets.

(i) The members of $P \cap Q =$

(ii) The members of $P \cup Q =$

(iii) The members of P' (the complement of P) =

[12 Marks]

END OF EXAM.