OUNDLE

Junior Entrance Examination 2014
Second Form Entry

## Mathematics

## Section A: 30 minutes No calculators allowed

- Write ALL your working and answers on this paper. Show enough working on each question to make it clear how you reached your answer. Underline your answers.
- Do not spend too long working on any particular question. Do not worry if you do not manage to complete every question.
- You may work in pen or pencil.

1. Work out
(a) $2457+468$

Answer $\qquad$
(b) $67 \times 32$

Answer
(c) $3916 \div 11$

## Answer

(d) $24 \%$ of 240

Answer
(e) $\frac{6}{7}+\frac{2}{5}$

## Answer

$\qquad$
(f) $4 \frac{1}{2} \div 1 \frac{2}{3}$

Answer
2. Calculate each of the following
(a) $5 \times(-4)$

Answer
(b) $((5-8) \times 3)+2$

Answer
(c) $1-(1-(1-1-1))$

Answer $\qquad$
3. Continue the following patterns, filling in the next two terms for each.
(a) $34,37,40,43$, $\qquad$
(b) 28.5, 26, 23.5, 21, $\qquad$
(c) $6,3,2,3,6$, $\qquad$
(d) $0,7,26,63$, $\qquad$
(e) $x, 2 x, 4 x, 8 x$, $\qquad$
4. If $x=3, y=-4$ and $z=-2$, find the value of
(a) $x+y+z$

Answer $\qquad$
(b) $x y$

Answer
(c) $3 y^{2}$

Answer $\qquad$
(d) $5 y z-x^{3}$

Answer
5. Calculate is the average (mean) of the numbers below:

| 87 | 32 | 76 | 33 | 97 |
| :--- | :--- | :--- | :--- | :--- |

Answer

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## Section B: 30 minutes Calculators allowed

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6. (a) What is the largest whole number that is a factor of (i.e. will divide into) 45 and 75 ?

## Answer

(b) What is the smallest whole number that 45 and 75 will divide into?

## Answer

$\qquad$
7. (a) What is 376 minutes in hours and minutes?

Answer
(b) Change 8.4 hours into minutes.
8. (a) I think of a number, then subtract nine. The result is seventeen. What was the original number?

Answer $\qquad$
(b) I think of a number, multiply it by three, then subtract nine. The result is forty-five. What was the original number?

Answer $\qquad$
(c) I think of a number, double it, then add five. The result is minus thirteen. What was the original number?

Answer $\qquad$
9. A rectangle has two sides of length 11 cm . The area of the rectangle is $176 \mathrm{~cm}^{2}$. Find the perimeter of the rectangle.

Answer
10. Write down the missing number in each of the following
(a) $1400 \times ?=70000$

Answer: $\qquad$
(b) $1400 \times ?=700$

## Answer:

(c) $1400 \div ?=7$

## Answer:

11. (a) Calculate $13 \times 98+13 \times 2$.

## Answer:

$\qquad$
(b) Calculate $2684 \times 345+2684 \times 541+1342 \times 228$.

