

GRADE:
NAME:
SURNAME:

HMC 2010 - FIRST ROUND

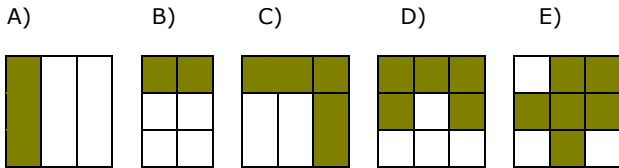
FOR MATHEMATICS TEACHER
LEARNER'S
MARK

HORIZON MATHEMATICS COMPETITION

Q1) Which number is between 6348 and 6358?

- A) 6251 B) 7143 C) 6355 D) 6369 E) 6342

Q2) Which figure is equivalent to $\frac{2}{3}$?



Q3) Which number is 20 more than half of 680?

- A) 320 B) 350 C) 330 D) 360 E) 380

Q4) Which shows $\frac{10}{25}$ as in decimal?

- A) 2,50 B) 0,04 C) 0,25 D) 0,40 E) 0,025

Q5) How is five thousand forty-one written in standard form?

- A) 5041 B) 5410 C) 5014 D) 5401 E) 5541

Q6) Which set of numbers is in order from least to greatest?

- A) 211; 256; 308; 347 B) 211; 308; 347; 256
C) 308; 211; 347; 256 D) 347; 308; 256; 211
E) 211; 308; 256; 347

Q7) Which number, Δ , makes $8 \times 9 < 4 \times \Delta$ true?

- A) 16 B) 19 C) 15 D) 18 E) 17

Q8) $(5 - 7) + (7 - 9) - (9 - 5) = ?$

- A) -4 B) -8 C) 0 D) 4 E) 8

Q9) $100 \div \left(\frac{1}{2} \div \frac{1}{5}\right) = ?$

- A) 1000 B) 250 C) 40 D) 10 E) None of them

Q10) Change 75 % to a fraction

- A) $\frac{1}{4}$ B) $\frac{1}{75}$ C) $\frac{4}{3}$ D) $\frac{7}{10}$ E) None of them

Q11) What is the place value of the 8 in 381513?

- A) Millions B) Hundred thousands
C) Thousands D) Ten thousands
E) None of them

Q12) Solve $(8,964 + 2,876) + 1,123 = ?$

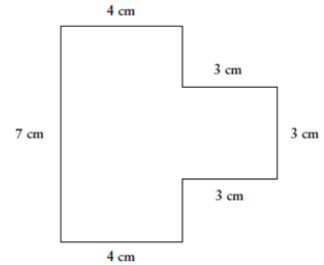
- A) 11,963 B) 12,963 C) 12,953 D) 11,953 E) 12,973

Q13) What is the area of this figure?



- A) 8 square units B) 10 square units
C) 9 square units D) 11 square units
E) 7 square units

Q14) What is the perimeter of the figure if all vertices are perpendicular?



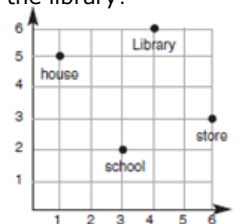
- A) 28 cm B) 24 cm
C) 32 cm D) 26 cm
E) 30 cm

Q15) If $3 \times A = 15$, $A + B = 15$ and $C - B = 15$, which of the following is $C \div A$?

- A) 20 B) 0 C) 1 D) 5 E) 6

Q16) According to the grid, which sequence of ordered pairs would allow you to move from the school to the library?

- A) (2;3), (3;3), (4;3), (5;3), (6;3), (6;4)
B) (3;2), (3;3), (3;4), (3;5), (3;6), (4;6)
C) (3;2), (3;3), (3;4), (3;5), (2;5), (1;5)
D) (2;3), (2;4), (2;5), (2;6), (3;6), (4;6)
E) (3;2), (4;2), (4;3), (4;4), (3;6), (4;6)



Q17) If today is Sunday, which day of the week is it going to be after 336 hours?

- A) Friday B) Tuesday C) Monday D) Saturday E) Sunday

Q18) Find the missing number N in the sequence:

2; 5; 10; 17; N; 37;.....

- A) 26 B) 25 C) 36 D) 27 E) 50

Q19) The number of bacteria is doubled in every minute. If the watch glass is filled with bacteria in 10 minutes, how long does it take to fill the quarter of watch glass?

- A) 9 min B) 2,5 min C) 8 min D) 5 min E) 7,5 min

Q20) A group of old ladies meet for an afternoon tea party. They bring all their cats. In all, there are 22 heads and 72 feet. How many old ladies and how many cats are in the room?

- A) 8 old ladies and 14 cats
B) 7 old ladies and 15 cats
C) 8 cats and 14 old ladies
D) 9 old ladies and 13 cats
E) 7 cats and 15 old ladies