# INDIAN SCHOOL SOHAR FORMATIVE ASSESSMENT - I (2015-2016) <br> MATHEMATICS 

SET II

CLASS: VII
DATE: 17/11/2015

## Note:

Do the calculations in working column. Give necessary formulae and steps wherever required.
SECTION A (Each question carries 1 mark)

1. Which of the following can be the length of the sides of a triangle?
(a) $5 \mathrm{~cm}, 5 \mathrm{~cm}, 10 \mathrm{~cm}$
(b) $8 \mathrm{~cm}, 7 \mathrm{~cm}, 6 \mathrm{~cm}$
(c) $10 \mathrm{~cm}, 4 \mathrm{~cm}, 15 \mathrm{~cm}$
(d) $1 \mathrm{~cm}, 2 \mathrm{~cm}, 3 \mathrm{~cm}$
2. If $\triangle \mathrm{ABC} \cong \triangle \mathrm{EDF}$, then:
(a) $\mathrm{AB}=\mathrm{ED}$
(b) $\mathrm{BC}=\mathrm{DE}$
(c) $\mathrm{AC}=\mathrm{DF}$
(d) $\angle \mathrm{A}=\angle \mathrm{D}$
3. Represent $62 \%$ as a decimal.
(a) 0.062
(b) 6.2
(c) 0.62
(d) $\frac{62}{100}$

SECTION B (Each question carries 2 marks)
4. In a competition, 100 students participate from a school. Of the 100 students, 20 students are from grade VII, 32 students are from grade VIII, 26 students are from grade IX and 22 students are from grade X . what is the percentage of students from each grade?
5. In $\triangle \mathrm{ABC}$, find the value of x .


SECTION C (Each question caries $\mathbf{3}$ marks)
6. In the given figure, state the three pairs of equal parts in $\triangle \mathrm{PQR}$ and $\triangle \mathrm{XYZ}$. Write the congruence in symbolic form. Give reason.

7. Find the breadth of the rectangle whose length is 40 cm and a diagonal is 41 cm . Also find its Perimeter.
8. Pushkar obtained 410 marks out of 500 and Pragya obtained 546 marks out of 700 . Find their percentage of marks. Whose performance is better?

SECTION D $(1 \times 4=4)$
9. In the figure, O is the mid-point of MN and PQ .
(a) State the three pairs of congruent parts used. Give reason.
(b) Prove that $\triangle \mathrm{MOP} \cong \triangle \mathrm{NOQ}$.
(c) Is MP $=$ NQ? Give reason.


