## WORK SHEET- 1 <br> GRADE: 7

ANNUAL EXAM, 2018-19

## SUBJECT: MATHEMATICS

1) Solve
A) $-6 /-9+4 /-8$
B) $6 /-8+-9 / 12$
C) $-9 / 2-3 / 9$
D) $7 / 10-(-13 / 4)$
E) $-6 / 66+12 / 126$
2) Find the additive inverse of
A) $-45 / 49$
B) $89 / 9$
3) Subtract the additive inverse of one-third from one-fifth. Subtract oneforth from the difference. Guess who I am?
4) Find the product.
A) $21 / 4 \times 1 / 19$
B) $6 / 9 \times-33$
C) $-15 / 26 \times-34 / 18$
5) Divide.
A) $16 \div 5 / 8$
B) $183 \div 19 / 21$
C) $-99 / 28 \div-11 / 36$
D) $-67 / 19 \div 78 / 38$
6) The product of two rational numbers is $48 / 5$. If one of the rational number is 66/7, find the other rational number.
7) Which of the given lengths of sides will form a triangle ?
A) $5 \mathrm{~cm}, 9 \mathrm{~cm}, 11 \mathrm{~cm}$
B) $7 \mathrm{~cm}, 4 \mathrm{~cm}, 12 \mathrm{~cm}$
C) $11 \mathrm{~cm}, 21 \mathrm{~cm}, 14 \mathrm{~cm}$
D) $15 \mathrm{~cm}, 4 \mathrm{~cm}, 22 \mathrm{~cm}$
8) Draw a triangle ABC . Make a point O anywhere inside the triangle.

Measure the length of the sides to prove:
A) $\mathrm{AO}+\mathrm{BO}>\mathrm{AB}$
B) $\mathrm{BO}+\mathrm{CO}>\mathrm{BC}$
9) Triangle $P Q R$ is a right-angled triangle. If The lengths of two of its sides are 12 cm and 5 cm , what is the length of third side?
10) Express the congruence of the given pairs of triangles, if it exists, and write them in symbolic form.

In Triangle $\mathrm{ABC}, \mathrm{AB}=4.5 \mathrm{~cm}, \mathrm{BC}=4 \mathrm{~cm}$, angle $\mathrm{B}=60^{\circ}$
In Triangle $\mathrm{PQR}, \mathrm{PQ}=4.5 \mathrm{~cm}, \mathrm{RQ}=4 \mathrm{~cm}$, Angle $\mathrm{Q}=60^{\circ}$
11) Write one difference between the SAS and RHS rule on a right-angled angled triangle.
12) What is ASA rule?
13) Find the perimeter and area.
A) Rectangle, $\mathrm{L}=12 \mathrm{~m}$ and $\mathrm{B}=9.5 \mathrm{~m}$
B) Square, side $=8 \mathrm{~m}$
C) Rectangle, $\mathrm{L}=24.2 \mathrm{~cm}$ and $\mathrm{B}=16.8 \mathrm{~cm}$
D) Square, side $=14.5 \mathrm{~cm}$
14) Two triangles have the same height. The base of one triangle is twice as long as other. What is the difference in there areas?
15) The area of a triangle is $10 \mathrm{~cm}^{2}$ and its base is 4 cm . Find its height.
16) Draw a factor tree for the expression.
A) $7 a b$
B) $10 y+2 x^{2}$
17) List the coefficients of $x$ in the expression $x-7 x^{2} y$.
18) Write an expression to denote the statement, a number cubed and 4 added to it.
19) How much greater is $19+20 x^{2}-11 x$ than $-12 x^{2}+6 x-4$ ?
20) Add the terms.
A) $2 x y$ and $6 x y$
B) $4 x^{2}$ and $8 x^{2}$
21) What are unlike term?
22) find the value of $6^{2}, 6^{3}$ and $6^{5}$ and verify whether $6^{2} \times 6^{3}=6^{5}$.
23) Solve $\left(b^{n}\right)^{4}$.
24) What is exponent?
25) What is base?

