# DELHI PUBLIC SCHOOL, JAMMU REVISION SHEET FOR PT-III <br> SESSION (2017-18) 

Class : VII
Sub: Maths

## Topics: Simple Equations, Rational Numbers, Comparing Quantities, Congruence of Triangles.

Q1: In $\frac{\mathrm{a}}{3}+5=2$, the value of a is
a) 9
b) -9
c) 1
d) 6

Q2: Which of the following numbers lies between 0 and 1 on a number line?
a) $\frac{3}{4}$
b) $\frac{4}{3}$
c) $\frac{11}{6}$
d) $\frac{9}{5}$

Q3: The ratio 2:3 means in percent
a) $20 \%$
b) $66.6 \%$
c) $33 \%$
d) $30 \%$

Q4: In a class of 30 students, $40 \%$ are girls. How many boys are there?
a) 12
b) 18
c) 13
d) 14

Q5: If $\triangle \mathrm{ABC} \cong \triangle \mathrm{KLM}$, write the parts that correspond to
a) $\angle \mathrm{L}$
b) AC

Q6: One of the angles of an Isosceles triangle is $70^{\circ}$ Find the other two angles which are equal.
Q7: The length of a rectangle is 3 times its width. If the perimeter is 84 cm , then find the length of the rectangle.
Q8: Find the solution of the given equations:
a) $3(t-3)=4(2 t+1)$
b) $9 x+5=4(x-2)+8$
c) $\quad \frac{7 m}{5}=m-4$

Q9: By subtracting 22 from 3 times a number, we obtain 68 . Find the number.
Q10: Sum of 3 consecutive numbers is 24 . Find the numbers. (Hint: Take the nos. as $x, x+1$ and $\mathrm{x}+2$ )
Q11: By what number should we multiply $\frac{-1}{6}$, so that the product is $\frac{-23}{9}$.
Q12: Subtract the sum of $\frac{-5}{7}$ and $\frac{15}{14}$ from $\frac{9}{28}$.
Q13: From a rope 20 m long, pieces of equal sizes are cut, each measuring $\frac{5}{4} \mathrm{~m}$. How many pieces are cut off? How much rope is left?
Q14: Simplify: a) $\left\{\frac{-11}{3}\right\}+\left\{\frac{-3}{4}\right\}+\left\{\frac{-11}{6}\right\}+\frac{3}{8}$
b) $\left\{\frac{-8}{7}\right\}+\left\{\frac{-4}{9}\right\}+\left\{\frac{-11}{7}\right\}+\frac{5}{6}$

Q15: Find $(x+y) \div(x-y) \quad$ if $\quad$ i) $\quad x=\frac{2}{3}, y=\frac{3}{2}$
ii) $\mathrm{x}=\frac{1}{4}, \mathrm{y}=\frac{3}{2}$

Q16: Find the distance whose $3 \frac{1}{3} \%$ is 3 km .
Q17: The price of the book is increased by $12 \%$. If its increased price is Rs. 145.60, find the original price.

Q18: Harish deposited Rs. 7500 in a finance company which pays $15 \%$ per annum. Find the amount Harish is expected to get after $5 \frac{3}{4}$ years.
Q19: Are 18,72, 288 in a continued proportion.
Q20: The ratio of the income to the expenditure of family is $8: 5$. Find the savings, if the income is Rs. 48,000.
Q21: Divide Rs. 1500 among A, B, C in the ratio $2: 5: 3$.
Q22: In the given figure, lines PM and QL bisect at O and $\mathrm{OP}=\mathrm{OM}=5 \mathrm{~cm}$.
Prove that $\triangle \mathrm{POQ} \xlongequal[=]{\triangle}$ MOL.


Q23: In $\triangle \mathrm{ABC}, \quad \angle \mathrm{B}=\angle \mathrm{C}, \mathrm{BL}$ and CM bisects $\angle \mathrm{B}$ and $\angle \mathrm{C}$ respectively. Prove that $\mathrm{BL}=\mathrm{CM}$.


Q24: In the given figure, $\mathrm{PS} \perp \mathrm{SR}$ and $\mathrm{PQ} \perp \mathrm{QR}$, also $\mathrm{SR}=\mathrm{QR}$. Show that
a) $\triangle \mathrm{PSR} \cong \triangle \mathrm{=} \triangle R$
b) $P Q=P S$


Q25: Find the mean proportional between 18 and 288.
Q26: Find the value of $p$ from the following proportions:
a) $3: p:: 21: 77$
b) $\mathrm{p}: 9:: 30: 54$

Q27: Find the selling price of an article for which cost price is Rs. 750 and gain is $8 \%$.

