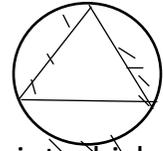


HOLIDAY HOMEWORK -WINTER BREAK 2018-19

CLASS-X MATHS

- 1 A bag contains 123 pens of which 45 are defective. A pen is drawn at random, Find the probability that it is good.
- 2 Three coins are tossing together. Write all possible outcomes. Also find the probabilities of the following
a) getting 3 heads b) getting at least 2 tails c) getting exactly one tail
- 3 A chord of a circle of radius 10cm subtends right angle at the centre. Find area of
a) minor segment b)major sector
- 4 In a circular table cover of radius 32 cm a design is formed leaving an equilateral triangle ABC. Find area of design.
- 5 Construct two tangents to a circle of radius 5 cm from an external point which is 9cm distant from the centre
- 6 Draw a triangle with $AB=4\text{cm}$, $BC=5\text{cm}$ and $\angle B=45^\circ$. Then construct a triangle whose sides are $\frac{4}{5}$ times the corresponding sides
- 7 Prove that opposite sides of a quadrilateral circumscribing a circle subtends supplementary angles at centre of the circle
- 8 The angle of elevation of top of a building from foot of the tower is 30° and angle elevation of top of tower from foot of building is 60° . If tower is 50m high, find the height of building.
- 9 Prove that $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 1/(\tan A + \cot A)$
- 10 Find the value of $\cos 38^\circ \cos 52^\circ - \sin 38^\circ \sin 52^\circ$



HOLIDAY HOMEWORK -WINTER BREAK 2018-19

CLASS-IX MATHS

- 1 Construct a triangle with $BC=4.5\text{cm}$, $\angle B=45^\circ$ and $AB+AC=12\text{cm}$
- 2 Construct a triangle with $QR=5\text{cm}$, $\angle Q=60^\circ$ and $PQ-PR=2.5\text{cm}$
- 3 Construct a triangle with $BC=4\text{cm}$, $\angle B=30^\circ$ and $AC-AB=3\text{cm}$
- 4 Construct a triangle with perimeter= 13cm , $\angle B=60^\circ$ and $\angle C=75^\circ$
- 5 State and prove angle sum property of a triangle
- 6 Prove that equal chords subtend equal angles at the centre of a circle
- 7 Prove that angle subtended at centre is double the angle subtended in the remaining part of the circle

HOLIDAY HOMEWORK -WINTER BREAK 2018-19

CLASS-IV MATHS

1 Prepare table with tally mark

Red, green, pink, blue, green, green, red, pink, pink, blue

Green, blue, green, red, green, pink, blue, green, pink, red

2 Prepare pictograph with suitable scale

year	No.of cycle produced
2000-2001	5000
2001-2002	8000
2002-2003	9000
2003-2004	4500

3 Prepare a bar graph

Days	Sale of books
Monday	560
Tuesday	340
Wednesday	780
Thursday	230
Friday	900