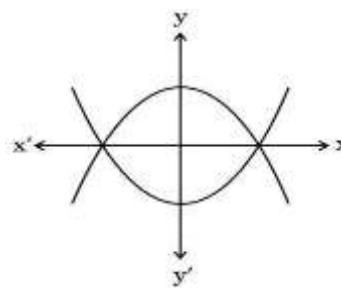


SETH M. R. JAIPURIA SCHOOLS BANARAS PARAO CAMPUS
WORKSHEET (2025-26)
Subject – MATHEMATICS
Class – X

Name - _____ Roll No- _____ Section- _____



13. A card is selected at random from a deck of 52 playing cards. The probability of it being a red face card is:

(A) $\frac{3}{13}$ (B) $\frac{2}{13}$ (C) $\frac{1}{2}$ (D) $\frac{3}{26}$

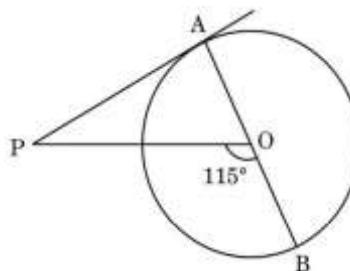
14. Which of the following is a rational number between $\sqrt{3}$ and $\sqrt{5}$?

(A) $1 \cdot 4142387954012 \dots$ (B) $2:32\bar{6}$ (C) π (D) $1 \cdot 857142$

15. If a sector of a circle has an area of 40π sq. units and a central angle of 72° , the radius of the circle is:

(A) 200 units (B) 100 units (C) 20 units (D) $10\sqrt{2}$ units

16. In the given figure, PA is a tangent from an external point P to a circle with centre O. If $\angle POB = 115^\circ$, then $\angle APO$ is equal to:



(A) 25° (B) 65° (C) 90° (D) 35°

17. A kite is flying at a height of 150 m from the ground. It is attached to a string inclined at an angle of 30° to the horizontal. The length of the string is:

(A) $100\sqrt{3}$ m (B) 300 m (C) $150\sqrt{2}$ m (D) $150\sqrt{3}$ m

18. A piece of wire 20 cm long is bent into the form of an arc of a circle of radius $\frac{60}{\pi}$ cm. The angle subtended by the arc at the centre of the circle is:

(A) 30° (B) 60° (C) 90° (D) 50°

Questions number 19 and 20 are Assertion and Reason based questions.

(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).
 (B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).
 (C) Assertion (A) is true, but Reason (R) is false.
 (D) Assertion (A) is false, but Reason (R) is true.

19. Assertion (A): The probability of selecting a number at random from the numbers 1 to 20 is 1.
 Reason (R): For any event E, if $P(E) = 1$, then E is called a sure event.

20. Assertion (A): If we join two hemispheres of same radius along their bases, then we get a sphere.
 Reason (R): Total Surface Area of a sphere of radius r is $3\pi r^2$.