1. If a ray stands on a line then the sum of the adjacent angles so formed is
(a) $100^{0}$
(b) $180^{\circ}$
c) $90^{\circ}$
(d) $360^{\circ}$
2. The sum of all the angles around a point is
(a) $100^{\circ}$
(b) $180^{\circ}$
c) $90^{\circ}$
(d) $360^{\circ}$
3. The sum of all the angles formed on the same side of a line at a given point on the line is
(a) $100^{\circ}$
(b) $180^{\circ}$
c) $90^{0}$
(d) $360^{\circ}$
4. The angle which is four times its complement is
(a) $60^{\circ}$
(b) $30^{\circ}$
c) $45^{0}$
(d) $72^{0}$
5. The angle which is five times its supplement is
(a) $150^{\circ}$
(b) $180^{\circ}$
c) $90^{\circ}$
(d) $360^{\circ}$
6. The measure of an angle which is equal to its complement is
(a) $60^{\circ}$
(b) $30^{\circ}$
c) $45^{0}$
(d) $15^{0}$
7. The measure of an angle which is equal to its supplement is
(a) $100^{\circ}$
(b) $75^{0}$
c) $90^{\circ}$
(d) $60^{\circ}$
8. If two parallel lines are intersected by a transversal, then the bisectors of the two pairs of interior angles enclose
(a) a square
(b) a rectangle
c) a parallelogram
(d) a trapezium
9. Two adjacent angles on a straight line are in the ratio $5: 4$. then the measure of each one of these angles are
(a) $100^{\circ}$ and $80^{\circ}$
(b) $75^{0}$ and $105^{0}$
c) $90^{\circ}$ and $90^{\circ}$
(d) $60^{\circ}$ and $120^{\circ}$
10. Two lines PQ and RS intersect at O . If $\angle \mathrm{POR}=50^{\circ}$, then value of $\angle \mathrm{ROQ}$ is
(a) $120^{\circ}$
(b) $130^{\circ}$
c) $90^{\circ}$
(d) $150^{0}$

11. In the adjoining figure the value of $x$ is
(a) $25^{0}$
(b) $28^{\circ}$
c) $30^{\circ}$
(d) $60^{\circ}$

12. If two straight lines intersect each other in such a way that one of the angles so formed measure $90^{\circ}$, then each of the remaining angles measures is
(a) $50^{\circ}$
(b) $75^{0}$
c) $90^{\circ}$
(d) $60^{\circ}$
13. In fig. AB and CD intersect each other at O . If $\angle \mathrm{AOC}+\angle \mathrm{BOE}=70^{\circ}$ and $\angle \mathrm{BOD}=40^{\circ}$ then the value of $\angle \mathrm{BOE}$ is
(a) $30^{\circ}$
(b) $110^{0}$
c) $120^{0}$
(d) $150^{0}$
14. In fig. POQ is a line, $\angle \mathrm{POR}=4 \mathrm{x}$ and $\angle \mathrm{QOR}=2 \mathrm{x}$ then the value of $x$ is

(a) $50^{\circ}$
(b) $20^{0}$
c) $30^{0}$
(d) $90^{\circ}$
15. In the given fig. $\angle \mathrm{AOC}+\angle \mathrm{BOD}=75^{\circ}$, then the value of $\angle \mathrm{COD}$ is
(a) $130^{0}$
(b) 105
c) $120^{0}$
(d) $75^{0}$
16. In the fig. the value of y is:

(a) $60^{0}$
(b) $18^{0}$
c) $30^{0}$
(d) $90^{\circ}$
17. In fig., the value of $x$ is:
(a) $60^{\circ}$
(b) $15^{0}$
c) $30^{0}$
(d) $45^{0}$

18. In fig. $\angle \mathrm{POR}$ and $\angle \mathrm{QOR}$ form a linear pair if $\mathrm{a}-\mathrm{b}=80^{\circ}$ then values of a and b respectively are:

(a) $130^{\circ}$ and $50^{\circ}$
(b) $50^{\circ}$ and $130^{\circ}$
c) $60^{\circ}$ and $120^{\circ}$
(d) $40^{\circ}$ and $140^{\circ}$
19. For two parallel lines sum of interior angles on the same side of a transversal line is
(a) $100^{0}$
(b) $180^{\circ}$
c) $90^{\circ}$
(d) $360^{\circ}$
20. In fig., lines XY and MN intersect each other at point O. If $\angle \mathrm{POY}=90^{\circ}$ and $\mathrm{a}: \mathrm{b}=2: 3$ then the value of $\angle \mathrm{C}$ is
(a) $140^{0}$
(b) $120^{0}$
c) $80^{0}$
(d) $95^{0}$
21. In fig. $\angle \mathrm{XYZ}=640$ and XY is produced to point P . If ray YQ bisect $\angle \mathrm{ZYP}$ then the value of $\angle \mathrm{XYQ}$ is

(a) $122^{0}$
(b) $126^{0}$
c) $302^{0}$
(d) $258^{0}$

22. In fig., $b$ is more than one-third of a right angle than $a$. The values of $a$ and $b$ are:
(a) $95^{\circ}$ and $85^{\circ}$
(b) $105^{0}$ and $75^{0}$
c) $60^{\circ}$ and $120^{\circ}$
(d) $65^{0}$ and $115^{0}$
23. In fig., $n-x=3^{0}$ then values of $x$ and $n$ are:

(a) $126^{\circ}$ and $129^{\circ}$
(b) $125^{\circ}$ and $128^{0}$
c) $150^{\circ}$ and $153^{0}$
(d) none of these
24. In fig., $\mathrm{q} \| \mathrm{r}$ and p is transversal. If $\angle 1$ and $\angle 2,3: 2$ then the values of $\angle 3$ and $\angle 4$ are:

(a) $108^{\circ}$ and $72^{0}$
(b) $72^{\circ}$ and $108^{0}$
c) $75^{\circ}$ and $105^{0}$
(d) $85^{\circ}$ and $95^{\circ}$

## PERL EDUCATION

1. In fig. the values of $x$ and $y$ are equal to:
(a) $130^{\circ}$
(b) $150^{0}$
c) $160^{\circ}$
(d) $135^{0}$

2. In fig. AB and CD intersect each other at O . If $\angle \mathrm{AOC}+\angle \mathrm{BOE}=70^{\circ}$ and $\angle \mathrm{BOD}=40^{\circ}$ then the value of $\angle \mathrm{COE}$ is
(a) $250^{\circ}$
(b) $70^{0}$
c) $30^{0}$
(d) $50^{\circ}$
3. In fig, if $A B\|C D, C D\| E F$ and $y: z=3: 7$ then value of $x$ is:

(a) $126^{\circ}$
(b) $120^{0}$
c) $58^{0}$
(d) $62^{0}$
4. In fig, if $\mathrm{AB} \| \mathrm{CD}, \mathrm{EF} \perp \mathrm{CD}$ and $\angle \mathrm{GED}=126^{\circ}$ then the value of $\angle \mathrm{AGE}$ is

5. In fig., $\mathrm{AB} \| \mathrm{CD}, \angle \mathrm{APQ}=50^{\circ}, \angle \mathrm{PRD}=127^{\circ}$, then the value of x and y respectively are
(a) $50^{\circ}$ and $77^{\circ}$
(b) $40^{\circ}$ and $85^{\circ}$
c) $60^{\circ}$ and $90^{\circ}$
(d) $85^{\circ}$ and $75^{0}$

6. In fig, AB
(a) $185^{\circ}$
(b) $280^{\circ}$
c) $285^{\circ}$
(d) $195^{0}$

7. In fig, if $\angle \mathrm{AOC}, \angle \mathrm{COD}$ are equal and $\angle \mathrm{BOD}$ is a right angle, then the values of $\angle \mathrm{AOC}$ and $\angle \mathrm{COD}$ are:
(a) $60^{\circ}$
(b) $30^{\circ}$
c) $45^{\circ}$
(d) $90^{\circ}$
8. In fig, the sum of $\angle \mathrm{a}$ and $\angle \mathrm{b}$ is:

(a) $\angle \mathrm{c}+\angle \mathrm{d}$
(b) $\angle \mathrm{d}+\angle \mathrm{e}$
(c) $\angle \mathrm{b}+\angle \mathrm{c}$
(d) $\angle \mathrm{a}+\angle \mathrm{c}$

9. In triangle interior opposite angle is always less than:
(a) any angle of the triangle
(b) opposite angle
(c) right angle
(d) exterior angle
10. In a triangle sum of two interior opposite angles is always equal to:
(a) third angle
(b) opposite angle
(c) right angle
(d) none of these
11. In a triangle exterior angle is always greater than:
(a) third angle
(b) interior opposite angles
(c) right angle
(d) none of these
12. What is the common between the three angles of a triangle and a linear pair
(a) angles are equal
(b) in both cases sum of angle is $180^{\circ}$.
(c) In triangle there are three angles and in linear pair there are two angles (d) none of these.
13. In the given below left figure, the bisectors of $\angle \mathrm{ABC}$ and $\angle \mathrm{BCA}$, intersect each other at point O. If $\angle \mathrm{BOC}=100^{\circ}$, the $\angle \mathrm{A}$ is
(a) $30^{\circ}$
(b) $20^{\circ}$
c) $40^{0}$
(d) $50^{\circ}$

14. In the given above right sided figure, $\angle 2$ and $\angle 8$ are known as
(a) exterior angles
(b) exterior angles on the same side of transversal.
(c) alternate angles
(d) alternate exterior angles.
15. In the given figure, measure of $\angle \mathrm{QPR}$ is
(a) $10.5^{0}$
(b) $42^{0}$
c) $111^{0}$
(d) $50^{0}$

16. An angle is 200 more than three times the given angle. If the two angles are supplementary the angles are
(a) $20^{\circ}$ and $160^{\circ}$
(b) $40^{\circ}$ and $140^{\circ}$
c) $60^{\circ}$ and $120^{\circ}$
(d) $70^{\circ}$ and $110^{\circ}$
17. In figure, if $1_{1} \| l_{2}$, what is the value of $x$
(a) $90^{\circ}$
(b) $85^{\circ}$
c) $75^{\circ}$
(d) $70^{\circ}$

18. If a wheel has six spokes equally spaced, then the measure of the angle between two adjacent spokes is
(a) $90^{\circ}$
(b) $30^{\circ}$
c) $60^{0}$
(d) $180^{\circ}$
19. In figure, which of the following statements must be true?
(i) $a+b=d+c$
(ii) $\mathrm{a}+\mathrm{c}+\mathrm{e}=180^{\circ}$
(iii) $b+f=c+e$
(a) (i) only
(b) (ii) only
c) (iii) only
(d) (ii) and (iii) both

20. The angle which is two times its complement is
(a) $60^{\circ}$
(b) $30^{\circ}$
c) $45^{0}$
(d) $72^{0}$
21. The angle which is two times its supplement is
(a) $150^{\circ}$
(b) $60^{\circ}$
c) $90^{\circ}$
(d) $120^{\circ}$
