| + + x <br> Department of . Mathematics $\qquad$ (1) D |  |  | INDIAN SCHOOL AL WADI AL KABIR Class IX, Mathematics Worksheet- Lines and Angles |  |  |  |  |  |
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| MULTIPLE CHOICE QUESTIONS |  |  |  |  |  |  |  |  |
| Q.1. | If two interior angles on the same side of a transversal intersecting two parallel lines are in the ratio $2: 3$, then the greater of the two angles is: |  |  |  |  |  |  |  |
|  | A | $54^{0}$ | B | $108^{0}$ | C | $120^{\circ}$ | D | $136^{0}$ |
| Q.2. |  |  |  |  |  |  |  |  |
|  | A | $75^{0}$ | B | $85^{0}$ | C | $95^{0}$ | D | $105^{0}$ |
| Q.3. | An exterior angle of a triangle is $80^{\circ}$ and two interior opposite angles are equal. The measure of each interior angle is: |  |  |  |  |  |  |  |
|  | A | $45^{0}$ | B | $40^{0}$ | C | $60^{\circ}$ | D | $100^{0}$ |
| Q.4. | In a right-angled triangle, if one acute angle is half the other, then the smallest angle is: |  |  |  |  |  |  |  |
|  | A | $15^{0}$ | B | $25^{0}$ | C | $35^{0}$ | D | $30^{0}$ |
| Q.5. | The angle which is half its supplement is: |  |  |  |  |  |  |  |
|  | A | $60^{0}$ | B | $120^{\circ}$ | C | $110^{0}$ | D | $130^{0}$ |
| Q.6. | Angles of a triangle are in the ratio $2: 4: 3$. The smallest angle of the triangle is: |  |  |  |  |  |  |  |
|  | A | $60^{0}$ | B | $40^{0}$ | C | $80^{\circ}$ | D | $20^{0}$ |
| Q.7. | An exterior angle of a triangle is $105^{\circ}$ and its two interior opposite angles are equal. Each of these equal angles is: |  |  |  |  |  |  |  |
|  | A | $37 \frac{1}{2}^{0}$ | B | $52 \frac{1}{2}^{0}$ | C | $72 \frac{1}{2}^{0}$ | D | $37^{\circ}$ |


| Q.8. | If one angle of a triangle is equal to the sum of the other two angles, then the triangle is: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | Obtuse triangle | B | Equilateral triangle |  | Isosceles triangle | D | Right triangle |
| Q.9. |  |  |  |  |  |  |  |  |
|  | A | $137{ }^{0}$ | B | $117^{0}$ | C | $48^{0}$ | D | $47^{0}$ |
| Q.10. | If $\mathrm{A}+\mathrm{B}=145^{\circ}$ and $\mathrm{B}+\mathrm{C}=100^{\circ}$, then angles $\mathrm{A}, \mathrm{B}, \mathrm{C}$ are: |  |  |  |  |  |  |  |
|  | A | $80^{0}, 65^{\circ}, 35^{0}$ | B | $80^{\circ}, 35^{0}, 65^{0}$ | C | $65^{\circ}, 80^{0}, 35^{0}$ | D | $35^{\circ}, 65^{0}, 80^{0}$ |
| Q.11. | If the angles of a triangle are in the ratio 5:3:7, then the triangle is: |  |  |  |  |  |  |  |
|  | A | Acute triangle | B | Right triangle | C | Obtuse triangle | D | Isosceles triangle |
| Q.12. |  | ure, if $1 \\| m$, wh | the | eo $x$. |  |  |  |  |
|  | A | $75^{0}$ | B | $85^{0}$ | C | $90^{\circ}$ | D | $70^{0}$ |
| Q.13. | An angle is $20^{\circ}$ more than three times the given angle. If the two angles are supplementary the angles are: |  |  |  |  |  |  |  |
|  | A | $20^{\circ}, 160^{\circ}$ | B | $40^{\circ}, 140^{\circ}$ | C | $60^{\circ}, 120^{\circ}$ | D | $70^{\circ}, 110^{0}$ |


| Q.14. | In Fig., POQ is a line. The value of x is: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | $20^{0}$ | B | $25^{0}$ | C | $35^{0}$ | D | $30^{0}$ |
| Q.15. |  | $\begin{aligned} & \text { e which } \\ & a+b=d \end{aligned}$ | foll <br> (ii) | stateme $c+e=18$ | ue? | $+\mathrm{f}=\mathrm{c}+\mathrm{e}$ |  |  |
|  | A | (i) only | B | (ii) only | C | (iii) only | D | (ii) and (iii) both |
| Q.16. |  | figure, $100^{\circ}$, the | is: | $\angle \mathrm{ABC} \text { a }$  | $\mathrm{CA},$ | sect each o | po |  |
|  | A | $30^{\circ}$ | B | $40^{\circ}$ | C | $50^{\circ}$ | D | $20^{\circ}$ |
| Q.17. | Angles of a triangle are in the ratio $3: 4: 5$, the largest angle of the triangle is: |  |  |  |  |  |  |  |
|  | A | $75^{\circ}$ | B | $60^{\circ}$ | C | $45^{\circ}$ | D | $90^{\circ}$ |


| Q.18. | In the given figure, $\mathrm{AC} \perp \mathrm{BD}$. Find y if $\angle \mathrm{BAC}=40^{\circ}$ and $\angle \mathrm{BED}=100^{\circ}$. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | $30^{0}$ | B |  | C | $80^{\circ}$ | D | $45^{\circ}$ |
| Q.19. | In the given figure if $1 \\| m$, then the value of $x$ is: |  |  |  |  |  |  |  |
|  | A | $35^{\circ}$ | B | 40 | C | $85^{\circ}$ | D | $95^{\circ}$ |
| Q.20. | In the given figure $A B \\| C D$. The value of $x$ is: |  |  |  |  |  |  |  |
|  | A | $30^{0}$ | B | $60^{\circ}$ | C | $80^{\circ}$ | D | $45^{\circ}$ |


| Answers |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | B | 2 | C | 3. | B | 4 | D |
|  | 5 | A | 6 | B | 7 | B | 8 | D |
|  | 9 | A | 10 | A | 11 | A | 12 | B |
|  | 13 | B | 14 | A | 15 | D | 16 | D |
|  | 17 | A | 18 | A | 19 | D | 20 | B |

