## INSCRIBED ANGLES

Find the indicated value(s).
3. $\mathrm{x}=$
7. $\mathrm{x}=$

REVIEW PROBLEMS: Solve each problem as indicated.

| 11. Solution: $\quad$ Which statement is always true? |
| :--- | :--- |
| A. $a+b+c=d$ |
| B. $a+b=d$ |
| C. $a-b=d$ |
| D. $b+c=d$ |


| 12. | A hollow globe of the world is in the shape of a sphere. The diameter of the sphere is 22 inches. To the nearest cubic inch, how much air does the globe hold? <br> F. $380 \mathrm{in}^{3}$ <br> G. $507 \mathrm{in}^{3}$ <br> H. $4181 \mathrm{in}^{3}$ <br> J. $5575 \mathrm{in}^{3}$ |
| :---: | :---: |
| 13. | Write the equation of the line passing through (1, 2) and (4, -1) |
| 14. | Write the equation of the line that passes through $(6,-5)$ and has an undefined slope. |
| 15. | Find the distance between $(3,7)$ and $(5,2)$. Write your exact answer in simplified form. |

Find the correct answer for each of the following. Clearly circle your answers. Work must be shown in order to receive credit.

| 16. | When the angle of elevation to the sun is $26^{\circ}$, a flagpole casts a <br> shadow that is 82 feet long. What is the height of the flagpole to <br> the nearest foot? |
| :--- | :--- | :--- |
| A. 36 ft <br> B. 40 ft <br> C. 74 ft <br> D. 166 ft |  |
| 17. | The legs of a right triangle measure 11.4 meters and 15.1 meters. <br> To the nearest tenth which could be the measure of the smallest <br> angle? |
| F. $31.1^{\circ}$ G. $37.1^{\circ}$ H. $38.6^{\circ}$ J. $52.9^{\circ}$ |  |

