## AREA \& PERIMETER OF RECTANGLES \& PARALLELOGRAMS

Find the perimeter and area of each rectangle.

| 1. $P=$ $\qquad$ $A=$ | 3 |
| :---: | :---: |
| 2. $P=$ $\qquad$ $A=$ $\qquad$ |  |
| 3. $P=$ $\qquad$ $A=$ $\qquad$ |  |

Find the indicated measures.

| 4. $\mathrm{P}=\ldots$ | The area of a square is $64 \mathrm{~cm}^{2}$. What is the perimeter? |
| :--- | :--- |
| 5. $\mathrm{A}=\ldots$ | Find the area of a square with a diagonal of 4 cm. |

Find the perimeter and area of each of the figures below.
6. $P=$ $\qquad$
$A=$ $\qquad$ 1 in 4 in 4 in

| 7. $P=$ | 7 ft |  |
| :---: | :---: | :---: |
|  | $3 \mathrm{ft} 2 \mathrm{ft}$ | 6 ft |
|  | 9 ft | 4 ft |

Find the indicated measures for each parallelogram.

| 8. $P=$ $A=$ |  |
| :---: | :---: |
| 9. $P=$ $\mathrm{A}=$ |  |
| $\text { 10. } P=$ $A=$ |  |
| 11. $P=$ $\mathrm{A}=$ |  |
| 12. $P=$ $\qquad$ $A=$ |  |
| 13. $b=$ | The area of a parallelogram is $340 \mathrm{in}^{2}$. The height is 17 in . Find the length of the base. |


| 14. $P=$ <br> $A=$ | Draw and classify the polygon with vertices $\mathrm{A}(1,5), \mathrm{B}(2,3)$, $C(-2,1)$, and $D(-3,3)$. Find the perimeter and area of the polygon. |
| :---: | :---: |
| Review |  |
| 15. | What is the length of $\overline{V Y}$ ? <br> A. 1.6 <br> B. 2 <br> C. 2.5 <br> D. 4 |
| 16. | A sailor on a ship sights the light of a lighthouse at an angle of elevation of 150 . If the light in the lighthouse is 189 feet higher than the sailor's line of sight, what is the horizontal distance between the ship and the lighthouse? Round to the nearest foot. <br> F. 49 feet <br> G. 51 feet <br> H. 705 feet <br> J. 730 feet |
| 17. | If $A B C D$ is a rhombus in which $m \angle 1=(x+15)^{\circ}$ and $\mathrm{m} \angle 2=(2 x+12)^{\circ}$, what is $\mathrm{m} \angle 1$ ? <br> A. 3 <br> B. 21 <br> C. 18 <br> D. 36 |


| 18. | Which expression best represents the area of the rectangle? <br> A. $2 x+2(x-a)$ <br> B. $x(x-a)$ <br> C. $x^{2}+(x-a)^{2}$ <br> D. $2 x(x-a)$ |
| :---: | :---: |
| 19. | A 16 foot by 18 foot rectangular section of a wall will be covered by square tiles that measure 2 feet on each side. If the tiles are not cut, how many of them will be needed to cover the section of the wall? <br> A. 288 <br> B. 144 <br> C. 72 <br> D. 17 |
| 20. | A driveway is shaped like a parallelogram with a base of 28 feet and a height of 17 feet. Covering the driveway with crushed stone will cost $\$ 2.75$ per square foot. How much will it cost to cover the driveway with crushed stone? |

