Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Integrated 2 Review Questions

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| 1. | *GJ* = ? | 2. | Determine the measure of arc *LM*. |
| 3. | In the given circle, $m\hat{RS}=162˚$ and $m\hat{QS}=86˚$. $m∠P= ?$ | 4. | Determine the measure of arc *AD*. |
| 5. | Determine the length of segment *AB*. | 6. | The point (-8, 7) lies on a circle whose equation is $\left(x+8\right)^{2}+\left(y-2\right)^{2}=r^{2}$. What is the radius of the circle? |
| 7. | Draw and label a 45-45-90 triangle, using special triangles. | 8. | Draw and label a 30-60-90 triangle, using special triangles. |
| 9. | Write the trigonometric ratio for tan*R* as a fraction. | 10. | Approximately how tall is the tree (round to the nearest tenth)? |
| 11. | Determine the length of *AB*. Round to the nearest hundredth. | 12. | Write the trigonometric ratio and solve for *x*. |
| 13. | In the given triangle, *PQ* = 5 and *QR* = 13. Write cos*R* as a fraction. | 14. | A ranger spots a fire from the top of a 500 ft watchtower. If the angle of depression from the top of the watchtower to the fire is 68˚, what is the horizontal distance between them? Round to the nearest foot. |
| 15. | Determine the area of the kite. $\left(A=\frac{d\_{1}d\_{2}}{2}\right)$ | 16. | The regular hexagon has a side length of 6. Determine its area. $\left(A=\frac{aP}{2}\right)$ |
| 17. | Determine the area of the parallelogram.$$(Use a^{2}+b^{2}=c^{2}to find the height, then A=bh)$$ | 18. | Determine the area of the composite figure. $(Use A=\frac{bh}{2} \& A=\frac{\left(b\_{1}+b\_{2}\right)h}{2}, then combine)$ |
| 18. | Find the shaded area. Leave your answer in terms of $π$. $(Use A=bh \& half of A=πr^{2}) $ | 19. | *M* is the midpoint of $\overbar{LN}$. *M* has coordinates (7, 5) and *L* has coordinates (-2, 6). What are the coordinates of *N*? |
| 20. | Identify the angle that is alternate exterior to $∠8$. | 21. | Find $m∠KNL$. |
| 22. | Determine $m∠P$. | 23. | $△$*DEF ~* $△$*LMN*. If the similarity ratio is $\frac{3}{2}$, what is *MN*? |