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| Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Date: \_\_\_\_\_\_\_\_\_ | Period: \_\_\_\_\_\_\_ |

Right triangle and trigonometry

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  | 1  I |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | N |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | V |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | S |  |  |  |  |  |  |  |  |  | 2  A |  |  |  |  |  |  |  |  |  | 3  3 |  |  |  |
|  |  |  |  |  |  | E |  |  |  |  |  |  |  | 4  R |  | N |  |  |  |  |  |  |  |  |  | 0 |  |  |  |
|  |  |  |  |  |  | T |  |  |  |  |  |  |  | I |  | G |  |  |  |  |  |  |  |  |  | 6 |  |  |  |
|  |  |  |  |  |  | R |  |  |  |  |  | 5  A |  | G |  | 6  L | E | G | S |  |  |  |  |  |  | 0 |  |  |  |
|  |  |  |  |  |  | I |  |  |  |  |  | N |  | H |  | E |  |  |  |  |  |  |  |  |  | 9 |  |  |  |
|  |  |  | 7  T | A | N | G | E | N | T |  |  | G |  | T |  | O |  | 8  S |  |  |  |  |  |  |  | 0 |  |  |  |
|  |  |  |  |  |  | F |  |  |  |  |  | L |  | T |  | F |  | I |  |  |  |  | 9  A |  |  | T |  |  |  |
|  |  |  |  |  |  | U |  |  |  |  |  | E |  | R |  | D |  | N |  |  |  |  | D |  |  | R |  |  |  |
|  |  | 10  C | O | S | I | N | E |  | 11  O | P | P | O | S | I | T | E | L | E | G |  |  |  | J |  |  | I |  |  |  |
|  |  |  |  |  |  | C |  |  |  |  |  | F |  | A |  | P |  |  |  |  |  |  | A |  |  | A |  |  |  |
|  |  |  |  | 12  P | Y | T | H | A | G | O | R | E | A | N | T | R | I | P | L | E |  |  | C |  |  | N |  |  |  |
|  |  |  |  |  |  | I |  |  |  |  |  | L |  | G |  | E |  |  |  |  |  |  | E |  |  | G |  |  |  |
|  |  |  | 13  H | Y | P | O | T | E | N | U | S | E |  | L |  | S |  |  |  |  |  |  | N |  |  | L |  |  |  |
|  |  |  |  |  |  | N |  |  |  |  |  | V |  | E |  | S |  |  |  |  |  |  | T |  |  | E |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | A |  |  |  | I |  |  |  |  |  |  | L |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | 14  P | Y | T | H | A | G | O | R | E | A | N | T | H | E | O | R | E | M |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  | N |  |  |  |  |  |  | G |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | O |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 15  T | R | I | G | O | N | O | M | E | T | R | Y |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 16  4 | 5 | 4 | 5 | 9 | 0 | T | R | I | A | N | G | L | E |  |  |  |  |  |  |  |  |  |  |

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| **Across**  **6.** the other two sides  **7.** trig ratio, opposite over adjacent  **10.** trig ratio, adjacent over hypotenuse  **11.** across from the theta angle  **12.** is a set of three integers a, b, c which form the sides of a right angled triangle  **13.** the side opposite the right angle is the hypotenuse  **14.** which says that the square of the length of the hypotenuse equals the sum of the squares of the lengths of the legs  **15.** is the study of the relationship of the sides and angles of a triangle  **16.** isosceles right triangles sometimes referred as, acute angles are equal | **Down**  **1.** perform the opposite operations that the sine, cosine, tangent, secant, cosecant and cotangent perform  **2.** angle which the plane descends  **3.** special right triangle has acute angles measuring 30 and 60 degrees.  **4.** contains a right angle, which measures 90 degrees and two acute angles each less than 90 degrees  **5.** angle between a horizontal line and the line of sight to an object above the horizontal line  **8.** trig ratios, opposite over hypotenuse  **9.** is adjacent next to the theta angle |