Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Table #: \_\_\_\_\_\_ Period: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_

**CH 7 SBAC Practice 3 (Pythagorean Theorem)\_Classwork**

HW: Ch. 7 Review p. 325 #2, 4 – 12, 15 – 17, 19, 24 – 27 (do in BIM)

**Warm Up: Evaluate the expression (7.1 & 7.2)**

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| 1. $12+8\sqrt{16}$
 | 1. $\frac{1}{2}+ \sqrt{\frac{72}{2}}$
 | 1. $\left(\sqrt[3]{-125}\right)^{3}+75$
 |

Use Pythagorean Theorem to find the missing side. (7.3)

|  |  |
| --- | --- |
| 1. | 2. |

Find the missing length of the figures

|  |
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| EXAMPLE |

|  |  |
| --- | --- |
| 3.  | 4. |

Use Pythagorean Theorem to solve the word problems. (7.5)

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| 6. An isosceles triangle has congruent sides of 15 cm.The base is 8 cm. What is the area of the triangle?  (Round your answer to the nearest tenth.) | 7. A softball diamond is a square that is 60’ on each side. If a player throws the ball from 1st base to 3rd base, how far will the ball travel? (Round your answer to the nearest tenth.) |

Use the distance formula to find the distance between the 2 points: $d= \sqrt{\left(y\_{2}-y\_{1}\right)^{2}+\left(x\_{2}-x\_{1}\right)^{2}}$

|  |  |
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| 8. (6, 8) and (5, -2) | 9. (2, 10) and (3, -8) |

**Without using a calculator**, estimate the following square roots to

a) the nearest integer and b) the nearest tenth

|  |  |
| --- | --- |
| **EXAMPLE:** $\sqrt{60}$a) 60 is between the perfect squares 49 & 64. It is closer to 64. Since $\sqrt{64}=8$, $\sqrt{60} ≈8$b) Guess and Check to estimate to the nearest tenth 7.62 = 57.76 7.72 = 59.24 7.82 = 60.84 SO $\sqrt{60}$ $≈7.7$ | 5. $\sqrt{24}$ |