Name _____   Date _____

Lesson 31: System of Equations Leading to Pythagorean Triples

Exit Ticket

Use a calculator to complete Problems 1–3.

1.   Is 7, 20, 21 a Pythagorean triple? Is $1, \frac{15}{8}, \frac{17}{8}$ a Pythagorean triple? Explain.

2.   Identify two Pythagorean triples using the known triple 9, 40, 41.

3.   Use the system $\begin{cases} x + y = \dfrac{t}{s} \\ x - y = \dfrac{s}{t} \end{cases}$ to find Pythagorean triples for the given values of $s = 2$ and $t = 3$. Recall that the

   solution in the form of $\left(\dfrac{c}{b}, \dfrac{a}{b}\right)$ is the triple a, b, c. Verify your results.