5.15 Special Equations

Chapter 5: Introduction to Algebra

Name: _____ Date: _____ Class/Period: _____

Problem 5.253 Classify $3x + 7 = 5x - 1$.

Problem 5.254 Classify $4x + 9 = 4x + 9$.

Problem 5.255 Classify $6x - 2 = 6x + 5$.

Problem 5.256 Classify $2(x + 4) = 2x + 8$.

Problem 5.257 Classify $5(x - 1) = 5x + 3$.

Problem 5.258 Classify $7x + 4 = 3x + 24$.

Problem 5.259 Classify $3(2x-5)+4=6x-11$.

Problem 5.260 Classify $4(x+2)-x=3x+9$.

Problem 5.261 Find k so $2(x+5)=2x+k$ has infinitely many solutions.

Problem 5.262 Give one value of k for which $3x+k=3x-7$ has no solution.

Problem 5.263 Find k so $kx+4=5x+4$ has infinitely many solutions.

Problem 5.264 Explain why testing ten values cannot prove infinitely many solutions.

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Problem 5.265 Choose a value of c so $4(2x-3)=8x+c$ has no solution, and explain why many answers are possible.

Problem 5.266 Find all values of k for which $(k-2)x+7=5x+7$ has infinitely many solutions.

Problem 5.267 A student reaches $9=9$ and reports $x=9$. Correct the conclusion and explain.

Problem 5.268 Write one equation of each type: one solution, no solution, and infinitely many solutions.