Topic: Solving Linear Inequalities

ACCESS MATHS

Fluency

√

1) $4x + 1 \leq 3x - 5$

2) $2x + 3 \geq x + 1$

3) $3x - 12 \leq x - 4$

4) $5x - 7 \leq 3x + 4$

5) $5 < 3x - 1 < 14$

6) $1 \leq 4x - 3 < 13$

7) $7 < 2x + 1 < 13$

8) $-1 < 5x + 4 \leq 19$

9) $11 \leq 3x + 5 < 17$

Reasoning

Mr. Barker, is purchasing equipment for the maths department. He can spend up to £1,400 to purchase exercise books, which cost £19 per set, and calculators, which cost £57 per case. Select the inequality that describes this situation. Use the given numbers and the following variables. x = the number of sets of books, y = the number of cases of calculators.

| $19x - 57y < 1400$ | $19x - 57y \leq 1400$ | $19x + 57y \leq 1400$ | $19x + 57y \geq 1400$ |

Problem Solving

Five cards are arranged. If two consecutive cards have any numbers in common, score 1 point. If no numbers are in common, deduct 1 point.

Why is the total score for this combination 0?.

| $x = 6$ | $x < 3$ | $x > 0$ | $x = 2$ | $x \geq 4$ |

What does this combination score? Can you arrange them to give a score of 4.

| $x > 0$ | $x = 6$ | $x \geq 4$ | $x = 2$ | $x < 3$ |

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