EXAM PAPERS PRACTICE

Linear Inequalities

Question Paper

Question 1

Find the integers which satisfy the inequality.

$$-5 < 2n - 1 \leq 5$$ [3]

Question 2

Solve $6x + 3 < x < 3x + 9$ for **integer** values of x. [4]

Question 3

(a) Solve $3n + 23 < n + 41$. [2]

(b) Factorise completely $ab + bc + ad + cd$. [2]

Question 4

List all the prime numbers which satisfy this inequality.

$$16 < 2x - 5 < 48$$ [3]

Question 5

Solve the inequality

$$\frac{2x-5}{8} > \frac{x+4}{3}.$$

[3]

Question 6

Solve the inequality $3 < 2x - 5 < 7$.

[2]

Question 7

Solve the inequality.

$$\frac{2x-3}{5} - \frac{x}{3} \leqslant 2$$

[3]

Question 8

x is a positive integer and $15x - 43 < 5x + 2$.

Work out the possible values of x.

[3]

Question 9

Solve the inequality.

$$3y + 7 \leqslant 2 - y$$ [2]

Question 10

Solve the inequality. $2x + 5 < \frac{x - 1}{4}$ [3]

Question 11

Solve the inequality $6(2 - 3x) - 4(1 - 2x) \leqslant 0.$ [3]

Question 12

Solve the inequality $\frac{2 - 5x}{7} < \frac{2}{5}.$ [3]

Question 13

Solve the inequality

$$4 - 5x < 2(x + 4).$$ [3]

Question 14

Solve the inequality [2]

$$5 - 3x < 17.$$

Question 15

(a) Solve the inequality $5 - \frac{2x}{3} > \frac{1}{2} + \frac{x}{4}$ [3]

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(b) List the positive integers which satisfy the inequality

$$5 - \frac{2x}{3} > \frac{1}{2} + \frac{x}{4}$$ [1]

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