Year 9 Mathematics Learning Journey: Unit 2 – Forming and Solving Equations

Step 10(H): Rearrange complex formulae including brackets and squares

Make u the subject of the formula $v^2 = u^2 + 2as$

Step 9: Rearranging formulae (two-step)

Rearrange the equation $2y + 8x = 10$ to the form $y = mx + c$ and state the gradient and y-intercept.

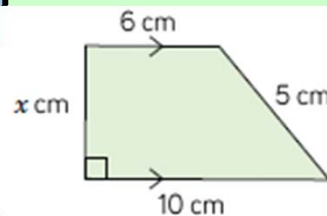**Step 8: Rearranging formulae (one-step)**

Which variable is the subject of the formula? How do you know?

Step 5: Inequalities with unknowns on both sides

Solve $-4x - 9 < -9x$

Step 6: Equations and inequalities in context

The area of the trapezium is $32cm^2$. Work out the perimeter of the trapezium.

6 cm
x cm
5 cm
10 cm

Step 7: Substitution into formulae and equations

In the formula $V=IR$, work out R when $I = 14$ and $V = 18$

Step 4: Equations with unknowns on both sides

When solving a four-term equation should be deal with the variables or constants first? Why?

Step 3: Inequalities with negative numbers

Solve $-10 - 8y \leq 20$

Step 2(R): Equations and inequalities with brackets

Solve $5(x - 2) \geq 17.7$

Step 1(R): Equations and inequalities

What is the difference between an equation and an inequality?

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