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## National 5 Maths Linear Equations

SQA past paper and specimen paper  
questions and answers by topic

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**National 5 Maths  
SQA 2016 Paper 1  
Question 8**

Solve the equation

$$\frac{2x}{3} - \frac{5}{6} = 2x.$$

Give your answer in its simplest form.

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Answer:

$$x = -\frac{5}{8}$$

National 5 Maths  
SQA 2017 Paper 1  
Question 15

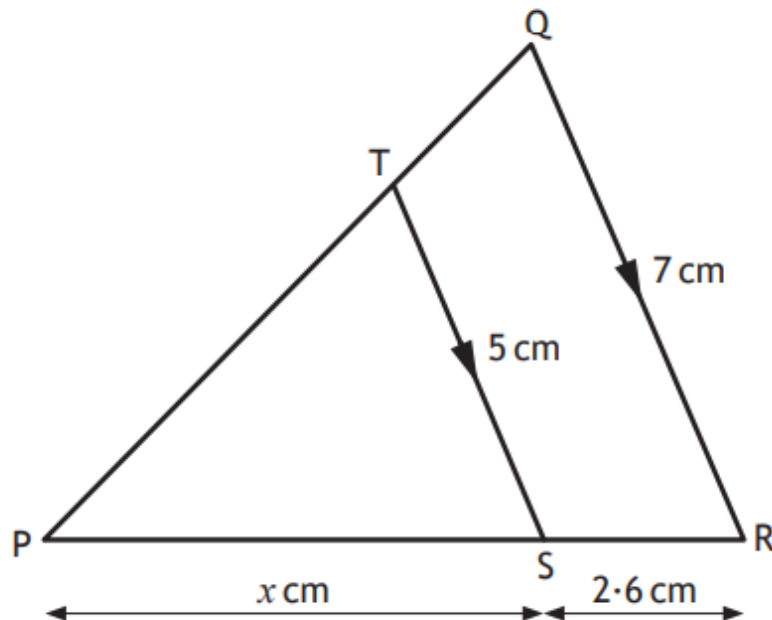
National 5 Maths

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In the diagram below:

- TS is parallel to QR
- TS = 5 centimetres
- QR = 7 centimetres
- SR = 2.6 centimetres



The length of PS is  $x$  centimetres.

Calculate the value of  $x$ .

3

Answer:

$$x = 6.5 \text{ or } x = \frac{13}{2}$$

National 5 Maths  
SQA 2019 Paper 1  
Question 14

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Solve the equation  $\frac{x}{2} - 1 = \frac{3-x}{5}$ .

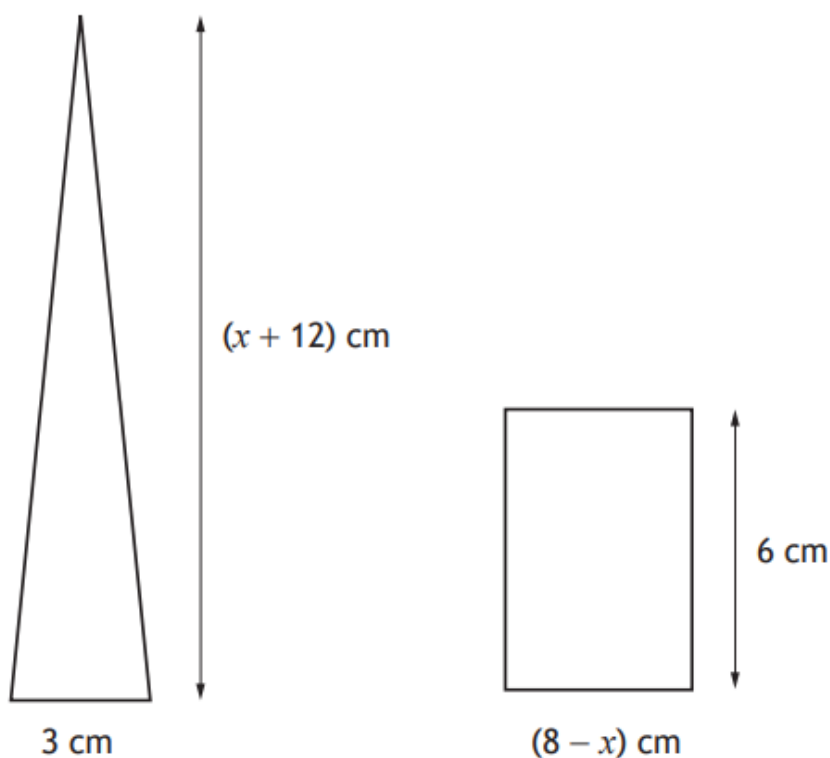
3

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Answer:

$$x = \frac{16}{7}$$

A triangle and rectangle are shown in the diagram.



- (a) Find an expression for the area of the triangle. 1
- (b) Given that the area of the triangle is equal to the area of the rectangle, find algebraically the value of  $x$ . 4

Answers:

(a)  $\frac{3}{2}(x+12)$

(b)  $x = 4$

**National 5 Maths**  
**SQA 2025 Paper 2**  
**Question 13**

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Solve the equation  $\frac{5x+1}{2} = \frac{4x}{3} + 1$ .

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Answer:

$$x = \frac{3}{7}$$