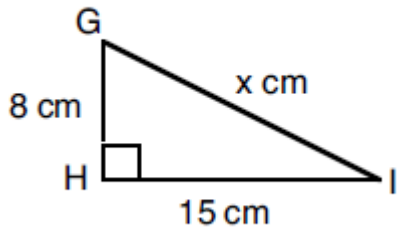
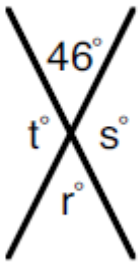
Homework 12

Due in:

Q2: You must use the cross-cancelling technique.

1. Evaluate 3^{-1}	3. Estimate the answer to $\frac{84.91+12.65}{4.7\times2.8}$. Please show your intermediate rounding.
2. $\frac{3}{4}\times\frac{5}{6}$ (show working)	4. What is the inverse function for $x \to \frac{x}{2}+3$

5. Is 225 in this sequence? Give a reason for your answer. 2, 8, 18, 32, 50, . . .	8. If you translate the point (1,7) by $\begin{pmatrix} 3 \\ -2 \end{pmatrix}$, what are its new coordinates?
6. Solve $5x + 2 < 7x - 4$	9. What is the value of x? 
7. Substitute a = ⅔ and b = -2 into $3a^2 - 5b$	10 Expand and simplify; $(x + 6)^2$

11. r = s = t =  (show working)	14. You must show your working out. 0.25 x 16
12. What is the interior angle of a regular decagon?	15. What is £180 increased by 35%?
13. A length of ribbon measures 15m with a 5% error interval. Write an inequality to show all the possible lengths.	16. What is $\frac{3}{7}$ of $\frac{4}{7}$ of 49?

17. What are the gradient and the coordinates of the y intercept of the graph $y = 4x - 7$	19. Solve the equation; $-x - 4 = -3$
18. Alice and Ben share some money in the ratio 3:5. Ben receives £55. How much does Alice receive?	20 A rectangle 7cm by 4cm is enlarged by a scale factor of 3. What is the perimeter of the enlarged shape?

Total: