

## Ex 11 Trigonometry

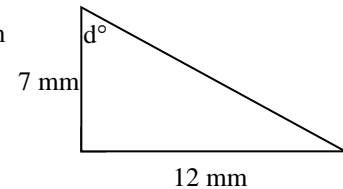
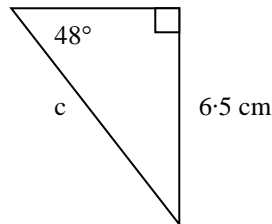
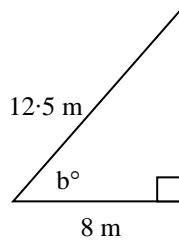
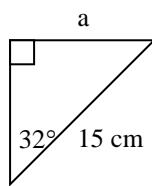
## Section A (Non-calculator)

- 1 Evaluate –
- a) 80% of 75g  
 c)  $3.09 \times 100$   
 e)  $\frac{3}{5} \div \frac{3}{4}$
- b)  $4 - 9.75 + 13.8$   
 d)  $1.757 \div 7$   
 f)  $\frac{3}{4} \div \frac{1}{2}$

## Section B (Knowledge)

**Only use your calculator if you need to!**

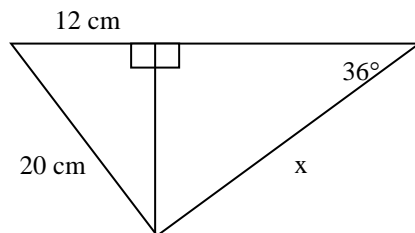
- 2 Work out a, b, c, d. (round answers to 3 significant figures)



- 3 Harry needs to use a ladder to put up a t.v. aerial on the wall of his house. The ladder is 5.2 metres long and has to reach 5 metres up the wall. For safety, the angle between the ladder and the ground should be between  $71^\circ$  and  $76^\circ$ . Can Harry use this ladder safely? YOU MUST GIVE A REASON FOR YOUR ANSWER.

## Section C (Mixed)

- 4 Work out x.



- 5 A mobile phone company lists its charges as shown below.

<b>Phone Rental</b>	<b>£10.99 per month</b>
<b>Peak Rate calls</b>	<b>35p per minute</b>
<b>Off-Peak calls</b>	<b>16p per minute</b>
	<b>+ VAT at 17.5%</b>

Copy and complete this phone bill.

Rental for 1 month	£10.99
258 minutes at peak rate	£
123 minutes at off-peak	£
VAT at 17.5%	£
<b>TOTAL</b>	<b>£</b>