

How many millions of pounds do hoax calls cost the fire brigade?
Use the information in the newspaper article and your financial skills to find out.

Adapted from "The Times" March 19, 2008

Hoax calls cost fire brigade £C million a year.

Hoax emergency calls about fires, terrorist attacks and traffic accidents are costing Britain's fire brigades more than £C million a year and putting lives at risk. The huge volume of prank calls means that firefighters who should be attending accident scenes or real fires, or preparing themselves for genuine incidents, are often tied up with malicious false alarms.

In total nearly 40,000 hoax calls were made to fire brigades in 2007 and B million (or 55%) of these calls resulted in firemen and women attending incidents that later turned out to be someone's idea of a practical joke.

The Times contacted fire brigades in England and Wales. West Midlands Fire and Rescue was inundated with hoax phone calls. It received 5,206 malicious calls and sent officers to 2,309 fake incidents. Steve Turek, assistant commissioner for service delivery, said:

1. a

Cost per call out	Unit cost (£)	Number	Total cost (£)
Vehicle			
People			
Total (A)			

"Clearly every hoax call we attend ties up our resources



and fire-fighters. Every hoax call we attend puts people's lives at risk."

The Government estimates that the average response cost of attending a false alarm is £A. It is common for two fire engines to be sent to an emergency call, each carrying about five firefighters at a cost of about £100 per person and £500 per vehicle.

In an effort to curtail the number of false calls, fire services are collaborating with telephone companies to clamp down on persistent offenders. In some counties people who make regular hoax calls receive a text message warning them that they have been traced and risk being cut off. Penalties for phoning 999 with a pretend complaint are severe and include a fine of up to £5,000 or a six-month jail sentence.

1. b.

Number of hoax calls (thousands)	% attended	Calls attended (thousands) (B)

1. c

Cost per call out (£) (A)	Number of call outs (B)	Total cost (C)

2. What other costs or consequences could there be from a hoax 999 call?

Teacher notes & answers

In school information is often pre-processed to make it easy for students to use, but in real situations relevant information needs to be found and extracted. This activity requires students to identify the numerical information in the article and use it to make their own estimate for the total financial cost of hoax calls in England & Wales.

1. a

Cost per call out	Unit cost (£)	Number	Total cost (£)
Vehicle	500	2	1000
People	100	10 (5x2)	1000
Total (A)			2000

1.b.

Number of hoax calls ('000)	% attended	Calls attended ('000) (B)
40	55%	22

Note: to find 55% find 50% of 40 (half) = 20

and then calculate 10% of the 50% = 2

Add them together: 55% of 40 = 22

1.c

Cost per call out (A)	Number of call outs (B)	Total cost (C)
2,000	22,000	44,000,000

Or £44 million

2. What other costs or consequences could there be from a hoax 999 call?

This gives those who finish quickly something to discuss. Other costs could include the "opportunity cost" i.e. there are a limited number of fire crews and if one is occupied with a hoax call it will not be available for a real emergency.