

## Social Media Star Worksheet

### The Scenario

You are the marketing executive of a high profile international fashion brand. Your latest handbag line is out and your job is to work out which celebrities to work with in promoting your brand and the new product line. You've narrowed your choices down to two celebrities: Kendall Jinker and Sally Burns.



To help in making your decision, you've pulled some modelling data on how each superstar's social media campaigns have run in the past. You find that products Kendall Jinker promotes follow this model:  $y = 100 \times 2^x$ .

Sally Burns' social media model is this:  $y = 200x^2$  (where  $x$  is number of days since the start of the campaign and  $y$  is number of people reached by the campaign). You have inside

information that your competitors have a campaign scheduled to start in 10 days, so you need to reach as many people as possible before then. Plot the reach of each star's social media over a 10 day campaign and choose your ambassador based on the results.

### Question 1 (4 marks)

If 2% of people reached by your campaign buy a \$1500 handbag, with a profit margin of \$500 and accounting for a celebrity fee of \$180,000, calculate the profit for the best celebrity.

### Question 2 (4 marks)

What celebrity will you choose if competitors have a campaign scheduled to start in 6 days and 2% of people reached by your campaign buy a \$1500 handbag, with a profit margin of \$500, and accounting for a celebrity fee of \$50,000?

### Question 3 (4 marks)

Calculate the profit for the best celebrity if you find that products Kendall Jinker promotes follow this model:  $y = 100 \times 3^x$  and Sally Burns' social media model is:  $y = 200x^2$ . Kendall Jinker's fee is \$300,000 and Sally Burns' \$180,000. (Use percentage and a profit margin from Question 1 and with a campaign duration of 10 days)