

## Being a Professional Mathematician

### Visual representations of mathematicians – worksheet

- | Exercise  | Comments for tutors  |
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| <p>1) Draw a sketch of a mathematician.</p> <p>What do the sketches say about your idea of a mathematician?</p> <p>Search Microsoft clipart or Google Images for “mathematician”. What kind of images come up? What attributes define the images as mathematicians?</p>   | <p>This exercise also appears on the worksheet “The public image of professional mathematicians”.</p> <p>Consider age, gender, race of sketched figures.</p> <p>Consider accessories (Spectacles? Beards?)</p> <p>Are these positive or negative images?</p> <p>Do clipart images reflect similar assumptions?</p> |
| <p>2) Look carefully at the portrait of Emilie du Chatelet reproduced at <a href="http://www.BeingAMathematician.org/du_Chatelet">www.BeingAMathematician.org/du_Chatelet</a>.</p> <p>Does she look like a mathematician? Why, or why not?</p> <p>Does she look like a woman who enjoys parties and social life?</p> <p>What features in the painting relate to these questions?</p> <p>Now listen to Patricia Fara’s account of du Chatelet.</p>   | <p>Her fine, carefully chosen clothes; the dividers and geometrical diagrams; her well-used books; her direct gaze at the viewer</p>   |
| <p>3) Find some portraits or photographs of mathematicians. For example, you might look up specific mathematicians on Wikipedia, look at pictures in the MacTutor History of Mathematics archive (<a href="http://www-history.mcs.st-and.ac.uk/">http://www-history.mcs.st-and.ac.uk/</a>).</p> <p>Think about the images. Bear in mind that some may be posed photographs or paintings intending to document someone for posterity while others might be casual snaps. For these questions, paintings or formal portrait photographs may be more revealing than snapshots.</p> |  |

Look also at some of the commissioned photographs “Faces of Mathematics” at <http://www.ma.hw.ac.uk/~ndg/fom.html>

For each image you are considering:

Do the images make the viewer think they are looking at a mathematician? If so, how?

What (if anything) do the images tell you about being a mathematician?

- 4) In his recent book *Duel at Dawn: Heroes, Martyrs and the Rise of Modern Mathematics* (Harvard, 2010), Amir Alexander argues that portraits of Abel, Galois and János Bolyai (which you can find on the MacTutor website (<http://www-history.mcs.st-and.ac.uk/>) depict “misunderstood heroes whose inner fire and profound insights set them apart from their uninspired fellow men”.

Do you read the portraits in this way?

Can you find other portraits of nineteenth-century mathematicians which support the view of mathematicians that Alexander describes? Can you find images which don't conform to that view?

Do the “Faces of Mathematics” at <http://www.ma.hw.ac.uk/~ndg/fom.html> present contemporary mathematicians in this way?

Do these images tell us anything about how mathematicians see themselves?

- 5) What does Arthur Sasse's famous photograph of Einstein sticking his tongue out tell us about Einstein? And about the public image of mathematicians? ([http://en.wikipedia.org/wiki/Albert\\_Einstein\\_in\\_popular\\_culture](http://en.wikipedia.org/wiki/Albert_Einstein_in_popular_culture))

Possible discussion about whether Einstein is considered to be a mathematician, either by mathematicians or by the general public.

This worksheet was created by Tony Mann and Chris Good in 2012 for the project "Being a Professional Mathematician", supported by the MSOR Network, the Institute of Mathematics and its Applications and the Universities of Greenwich and Birmingham as part of the National HE STEM Programme. It is released under a Creative Commons Attribution-NonCommercial-ShareAlike licence. The project materials are available at [www.BeingAMathematician.org](http://www.BeingAMathematician.org).



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