

# Mark Algernon's homework

Algernon is a made up student. He hasn't done very well on his homework.

- Work in pairs
- The box below is a scan of some homework handed in by Algernon
- Read each question and try to see what mistake Algernon has made. What step was the mistake in? Did Algernon get *anything* right in the question?
- Agree a sentence you could use to explain what the mistake was to Algernon; make a note of the comment
- Can you answer the questions yourselves?

1. What is  $a^2 + a^2$  ?

$$a^2 + a^2 = a^4$$

2. Solve the equation  $3x - 7 = 11$

$$3x = 11 - 7 \text{ so}$$
$$3x = 4$$
$$x = \frac{4}{3}$$

3.  $A = \frac{x}{5} + 10$ . If  $x = 15$ , what is the value of  $A$ ?

$$A = \frac{15}{5} + 10 = \frac{25}{5} = 5.$$

4. Simplify  $3x + 4y - 2x + 3y$

$$= 5x + 7y = 12xy$$

5. Multiply out  $3(4x - 3) - 2(3x - 4)$

$$= 12x - 9 - 6x - 8$$
$$= 6x - 17$$

Algernon isn't real

Each of these mistakes is quite common, but real students don't make all of them in one piece of work!