

Easy multiplications

Purpose

To investigate strategies for mental computation with multiplication

Outcomes

NS3.3 Selects and applies appropriate strategies for multiplication and division

MA3-6NA

Framework reference

To move students beyond M&D level 5

Teaching points

This activity can easily be adapted to focus on other operations.

Activity outline

Have the students focus on the following list of multiplications, written on the board:

$$4 \times 25$$

$$20 \times 15$$

$$78 \times 37$$

$$42 \times 5$$

$$25 \times 12$$

$$2 \times 148$$

$$99 \times 9$$

$$60 \times 7$$

Ask a student to select from the list one multiplication that would be easy to work out mentally. Ask all students to work out the selected multiplication. Identify the answer with the class. Select students to share how they carried out the mental computation. Discuss the efficiency of the different solution methods shared. Have the students provide examples of multiplications that could be solved using similar strategies and record two or three of these on the board.

Proceed similarly to discuss each of the multiplications listed.

Discuss with the class what makes some multiplications easy to solve mentally and some difficult.