



1)	$16 \times 20 = 320$	$42 \times 5 = 210$	$450 \div 25 = 18$	$8600 \div 200 = 43$
	$16 \times 200 = 3200$	$420 \times 5 = 2100$	$4500 \div 25 = 180$	$860 \div 20 = 43$
	$20 \times 160 = 3200$	$50 \times 42 = 2100$	$4500 \div 250 = 18$	$8600 \div 2 = 4300$
	$160 \times 200 = 32\ 000$	$4200 \times 50 = 210\ 000$	$2250 \div 25 = 90$	$860 \div 43 = 20$

2) Methods should include the following:

- $72 \times 100 = 7200$   
 $7200 \div 2 = 3600$
- $72 \times 5 = 360$  (Children might partition 72 as an intermediate step:  $(70 \times 5) + (2 \times 5)$ .)  
 $360 \times 10 = 3600$
- $72 \times 10 = 720$   
 $720 \times 5 = (720 \times 10) \div 2 = 3600$

1) Because the divisor (the number that she is dividing by) is ten times smaller, the quotient (the answer to her division) will be ten times greater. Cleo should have recognised her error by checking her answer using the inverse ( $26 \times 3 < 7800$ ).

2) a) When multiplying, if you make one of the factors (numbers that are being multiplied) ten times smaller and the other ten times greater, this creates an equivalent calculation. This means that the calculations have the same value.

$$150 \times 25 = 15 \times 250 = 3750$$

b) Here are some possible answers:

$$23 \times 250 = 230 \times 25$$

$$1600 \times 200 = 16000 \times 20$$

$$570 \times 50 = 57 \times 500$$

1) Possible answers include the following:

$$40 \times 320 = 640 \times 20$$

$$30 \times 150 = 450 \times 10$$

$$60 \times 400 = 800 \times 30$$

$$50 \times 200 = 500 \times 20$$

$$30 \times 600 = 200 \times 90$$

2) Possible answers include the following:

$$320 \div 40 = 160 \div 20$$

$$500 \div 50 = 100 \div 10$$

$$460 \div 20 = 230 \div 10$$

$$900 \div 30 = 300 \div 10$$

$$800 \div 80 = 400 \div 40$$

