Reasoning and Problem Solving
Multiplying by 10, 100 and 1,000

Developing

1a. The pattern is multiply by 10. A. 1,000 and 10,000, B. 7,600 and 76,000, C. 1,540 and 15,400.

2a. Sinead is correct. Cian has only added 2 zeros to his number and not multiplied by 100.

3a. Possible combinations include 1.3 x 10 = 13, 1.3 x 100 = 130, 13 x 10 = 130

Expected

4a. The pattern is multiply by 20. A. 600 and 12,000, B. 400 and 8,000, C. 2,000 and 40,000.

5a. Beth is correct. Sam has only multiplied his number by 2 not 20.

6a. Possible combinations include 0.25 x 10 = 2.5, 0.25 x 1,000 = 250, 2.5 x 100 = 250, 2.5 x 1,000 = 2,500, 250 x 10 = 2,500

Greater Depth

7a. The pattern is multiply by 100. A. 23,000 and 2,300,000, B. 12,000 and 1,200,000, C. 4,000 and 400,000. Various possible answers for own sequence which follow the pattern x 100.

8a. Lucy is correct. Josh has multiplied his number by 20 instead of by 10 and then 10 again (x 100).

9a. Possible combinations include 0.125 x 10 x 10 = 12.5, 0.125 x 10 x 100 = 125, 12.5 x 10 x 10 = 1,250, 0.125 x 1,000 x 10 = 1,250, 0.125 x 100 x 100 = 1,250, 12.5 x 10 x 10 = 1,250

Reasoning and Problem Solving
Multiplying by 10, 100 and 1,000

Developing

1b. The pattern is multiply by 10. A. 2,000 and 20,000, B. 9,300 and 93,000, C. 7,240 and 72,400.

2b. Bo is correct. Halina has only added a zero to her number and not multiplied by 10.

3b. Possible combinations include 0.45 x 100 = 45, 0.45 x 1,000 = 450, 45 x 10 = 450

Expected

4b. The pattern is multiply by 30. A. 3,510 and 105,300, B. 23,490 and 704,700, C. 1,107 and 33,210.

5b. Faizel is correct. Hannah has only added 3 zeros to her number and not multiplied by 1,000.

6b. Possible combinations include 2.475 x 10 = 24.75, 2.475 x 100 = 247.5, 2.475 x 1,000 = 2,475, 24.75 x 10 = 247.5, 24.75 x 100 x 2,475, 247.5 x 10 = 2,475

Greater Depth

7b. The pattern is multiply 20. A. 80 and 1,600, B. 56 and 1,120, C. 192 and 3,840. Various possible answers which follow the pattern x 20.

8b. Jed is correct. Isabel has only multiplied her number by 5 not 50.

9b. Possible combinations include 0.375 x 10 x 10 = 37.5, 0.375 x 10 x 100 = 375, 0.375 x 10 x 1,000 = 3,750, 0.375 x 100 x 100 = 3.750, 37.5 x 10 x 10 = 3,750