

Week 11 – Maths Answers

Lesson 1

9a. Nine squared = eighty-one; ten squared = one hundred; eight squared = sixty-four.

10a. Three squared = 9; $9 \times 9 = 81$; $5 \times 5 = 25$; two squared = 4

12a.

12^2	12×12	144
7^2	7×7	49
8^2	8×8	64
3^2	3×3	9

9b. Seven squared = forty-nine; twelve squared = one hundred and forty-four; eleven squared = one hundred and twenty-two.

10b. Six squared = 36; $1 \times 1 = 1$; $4 \times 4 = 16$; ten squared = 100

12b.

9^2	9×9	81
11^2	11×11	121
10^2	10×10	100
1^2	1×1	1

Challenge

7a. Various answers, for example:

$7^2 + 4^2 = 65$, $7^2 + 6^2 = 85$, $9^2 + 4^2 = 97$, $8^2 + 5^2 = 89$, $8^2 + 3^2 = 73$ and

$10^2 + 8^2 + 4^2 = 180$, $12^2 + 4^2 + 2^2 = 164$, $11^2 + 9^2 + 6^2 = 166$, $10^2 + 7^2 + 3^2 = 158$,

$11^2 + 5^2 + 4^2 = 162$

8a. 4, 12

Lesson 2

5a. 6^3 and 216; 9^3 and 729; 5^3 and 125

6a. < ; >

8a. 520; 1,267

5b. 8^3 and 512; 12^3 and 1,728; 7^3 and 343

6b. =; >

8b. 1,064; 604

Challenge

5b. Kayleigh is not correct because no whole number can be multiplied by itself and then by itself again to reach the product 733. The cube number of 9 is 729 and the cube number of 10 is 1,000.

6b. 8

Lesson 3

- 5a. Place value chart representing 26,130
6a. 3,520,100 circled
7a. A = 183,600; B = 410,590; C = 6,273,000
8a. 100 and 10

- 5b. Place value chart representing 529,100
6b. 234,600 circled
7b. A = 5,240,800; B = 3,079,000; C = 291,750
8b. 10 and 1,000

Challenge

- 4b. 237,816 seeds.
5b. A. triangle = 1,000 because $480 \times 1,000 = 480,000$
B. square = 100 because $20,705 \times 100 = 2,070,500$
C. circle = 10 because $4,816 \times 10 = 48,160$

Lesson 4

- 5a. $42,000 \div 10 = 4,200$;
 $42,000 \div 100 = 420$;
 $42,000 \div 1,000 = 42$
6a. $72,600 \div 100 = 726$
 $72,600 \div 10 = 7,260$

- 5b. $84,000 \div 10 = 8,400$;
 $84,000 \div 100 = 840$;
 $84,000 \div 1,000 = 84$
6b. $29,000 \div 1,000 = 29$
 $29,000 \div 10 = 2,900$

- 7a. Various answers, for example:
(c) $64,000 \div 1,000 < 84,700 \div 100$;
 $99,000 \div 1,000 < 84,700 \div 100$
8a. True

Challenge

- 5a. Daniel has divided by 1,000 instead of 100. He has moved the digits one column too far. The correct answer is 620 not 62
6a. Various answers, for example: 25,000; 22,300; 30,400

Lesson 5

4a. True

5a. $3,572 \times 3 = 10,716$

6a. $6,405 \times 4 = 25,620$

4b. False. $1,071 \times 3 = 3,213$

5b. $2,707 \times 5 = 13,535$

6b. $4,821 \times 5 = 24,105$

Challenge

7a. $5,207 \times 4 = 10,828$. Cassie has not added the tens when exchanging.

8a.

	7	1	0	8
x				6
<hr/>				
4	2	6	4	8
<hr/>				
			4	