

## Year 4 Term 2 Homework

<b>Student Name:</b> _____	<b>Grade:</b> _____
<b>Date:</b> _____	<b>Score:</b> _____

### Table of contents

<b>16 Year 4 Term 2 Week 6 Homework</b>	<b>1</b>
16.1 Topic 1 — Fractions . . . . .	1
16.1.1 Adding & subtracting Fractions 2 . . . . .	1
16.1.2 Multiplying & Dividing Fractions 2 . . . . .	2
16.2 Topic 2 — Number Problems . . . . .	3
16.2.1 Number Problem 7 . . . . .	3
16.2.2 Number Problem 8 . . . . .	4
16.3 Topic 3 — Percentages . . . . .	5
16.3.1 Percentage 11 . . . . .	5
16.3.2 Percentage 12 . . . . .	6
16.4 Topic 4 — Number Patterns . . . . .	7
16.4.1 Number Patterns 3 . . . . .	7
16.4.2 Number Patterns 4 . . . . .	8
16.5 Quiz 6 . . . . .	9
16.5.1 Part A — 10 Multiple Choice Questions (1 mark each) . . . . .	9
16.5.2 Part B — 10 Average Questions (2 marks each) . . . . .	10
16.5.3 Part C — 10 Extension Questions (3 marks each) . . . . .	12
16.5.4 Part D — 8 Challenging Questions (5 marks each) . . . . .	15

This edition was printed on June 2, 2017 with **answers**.

Camera ready copy was prepared with the **L<sup>A</sup>T<sub>E</sub>X<sub>2</sub> $\epsilon$**  typesetting system.

Copyright © 2000 - 2017 Yimin Math Centre (www.yiminmathcentre.com)

**16 Year 4 Term 2 Week 6 Homework****16.1 Topic 1 — Fractions****16.1.1 Adding & subtracting Fractions 2**

$$\textcircled{1} \quad 2\frac{2}{5} + 1\frac{4}{6} = \underline{\hspace{10em}}$$

$$\textcircled{2} \quad 1\frac{3}{7} + 2\frac{1}{2} = \underline{\hspace{10em}}$$

$$\textcircled{3} \quad 1\frac{5}{7} + 1\frac{2}{4} = \underline{\hspace{10em}}$$

$$\textcircled{4} \quad 2\frac{1}{2} + 1\frac{2}{3} = \underline{\hspace{10em}}$$

$$\textcircled{5} \quad 1\frac{2}{7} + 2\frac{2}{6} = \underline{\hspace{10em}}$$

$$\textcircled{6} \quad 2\frac{2}{6} - 1\frac{1}{6} = \underline{\hspace{10em}}$$

$$\textcircled{7} \quad 2\frac{4}{5} - 1\frac{4}{7} = \underline{\hspace{10em}}$$

$$\textcircled{8} \quad 2\frac{3}{4} + 1\frac{6}{7} = \underline{\hspace{10em}}$$

$$\textcircled{9} \quad 2\frac{3}{5} - 1\frac{1}{5} = \underline{\hspace{10em}}$$

$$\textcircled{10} \quad 1\frac{3}{6} + 1\frac{1}{3} = \underline{\hspace{10em}}$$

Score: \_\_\_\_\_

**16.1.2 Multiplying & Dividing Fractions 2**

$$\textcircled{1} \quad 1\frac{3}{7} \times 2\frac{2}{7} = \underline{\hspace{10cm}}$$

$$\textcircled{2} \quad 2\frac{3}{4} \times 1\frac{1}{2} = \underline{\hspace{10cm}}$$

$$\textcircled{3} \quad 2\frac{2}{6} \times 2\frac{2}{5} = \underline{\hspace{10cm}}$$

$$\textcircled{4} \quad 2\frac{2}{4} \times 1\frac{5}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{5} \quad 2\frac{1}{2} \times 2\frac{4}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{6} \quad 2\frac{2}{5} \div 2\frac{1}{6} = \underline{\hspace{10cm}}$$

$$\textcircled{7} \quad 2\frac{1}{5} \div 1\frac{1}{3} = \underline{\hspace{10cm}}$$

$$\textcircled{8} \quad 2\frac{3}{5} \times 2\frac{6}{7} = \underline{\hspace{10cm}}$$

$$\textcircled{9} \quad 1\frac{4}{5} \times 2\frac{4}{5} = \underline{\hspace{10cm}}$$

$$\textcircled{10} \quad 2\frac{1}{4} \times 2\frac{3}{4} = \underline{\hspace{10cm}}$$

---

Score:

**16.2 Topic 2 — Number Problems****16.2.1 Number Problem 7**

- ① \_\_\_\_\_ One less than four times a number is 35. Find the number.
- ② \_\_\_\_\_ Nine times the sum of a number and ten times the number is 594. Find the number.
- ③ \_\_\_\_\_ Three more than seven times a number is 52. What is the number?
- ④ \_\_\_\_\_ The product of two numbers is 44. One number is seven less than the other. What are the numbers?
- ⑤ \_\_\_\_\_ The quotient of a number and six increased by 6 is 12. What is the number?
- ⑥ \_\_\_\_\_ Four times a number increased by 8 is 48. Find the number.
- ⑦ \_\_\_\_\_ Seven times a number diminished by 8 is 27. Find the number.
- ⑧ \_\_\_\_\_ The sum of two numbers is 9. One number is three less than the other. Find the numbers.
- ⑨ \_\_\_\_\_ One of two numbers is three more than the other. The sum of the numbers is 17. Find the numbers.
- ⑩ \_\_\_\_\_ One number is five times another. Their sum is 30. Find the numbers.

---

Score: \_\_\_\_\_

**16.2.2 Number Problem 8**

- ① \_\_\_\_\_ The product of two numbers is 120. One number is seven less than the other. What are the numbers?
- ② \_\_\_\_\_ One of two numbers is ten more than the other. The sum of the numbers is 28. Find the numbers.
- ③ \_\_\_\_\_ Three times the sum of a number and ten times the number is 66. Find the number.
- ④ \_\_\_\_\_ Nine times a number diminished by 15 is 21. Find the number.
- ⑤ \_\_\_\_\_ The sum of two numbers is 28. The larger number is three times the smaller number. What are the numbers?
- ⑥ \_\_\_\_\_ Twice a number increased by 2 is 6. Find the number.
- ⑦ \_\_\_\_\_ Three more than eight times a number is 51. What is the number?
- ⑧ \_\_\_\_\_ One less than eight times a number is 87. Find the number.
- ⑨ \_\_\_\_\_ One number is five times another. Their sum is 36. Find the numbers.
- ⑩ \_\_\_\_\_ The quotient of a number and nine increased by 5 is 12. What is the number?

---

Score: \_\_\_\_\_

**16.3 Topic 3 — Percentages****16.3.1 Percentage 11**

	Percent	Decimal	Fraction	Ratio
①			$\frac{3}{10}$	
②		0.79		
③				7 : 25
④	38%			
⑤		0.2		
⑥		0.44		
⑦			$\frac{37}{100}$	
⑧	66%			
⑨				9 : 20
⑩				13 : 50
⑪			$\frac{81}{100}$	
⑫				19 : 100
⑬	14%			
⑭		0.98		
⑮	21%			

Score: \_\_\_\_\_

## 16.3.2 Percentage 12

	Percent	Decimal	Fraction	Ratio
①			$\frac{71}{100}$	
②			$\frac{69}{100}$	
③	55%			
④			$\frac{99}{100}$	
⑤	37%			
⑥		0.73		
⑦		0.83		
⑧			$\frac{2}{5}$	
⑨		0.21		
⑩			$\frac{93}{100}$	
⑪		0.48		
⑫		0.3		
⑬	47%			
⑭			$\frac{1}{5}$	
⑮				23 : 100

Score:

**16.4 Topic 4 — Number Patterns****16.4.1 Number Patterns 3**

① 63, 58, 67, 62, 71, 66, 75, \_\_, \_\_

② 4, 10, 18, 28, 40, 54, 70, \_\_, \_\_

③ 48, 55, 61, 66, 70, 73, 75, \_\_, \_\_

④ 63, 55, 56, 47, 48, 38, 39, \_\_, \_\_

⑤ 7, 14, 9, 18, 13, 26, 21, \_\_, \_\_

⑥ 3, 6, 9, 18, 21, 42, 45, \_\_, \_\_

⑦ 7, 14, 12, 24, 22, 44, 42, \_\_, \_\_

⑧ 55, 53, 55, 52, 54, 50, 52, \_\_, \_\_

⑨ 8, 12, 18, 26, 36, 48, 62, \_\_, \_\_

⑩ 4, 8, 11, 22, 25, 50, 53, \_\_, \_\_

⑪ 6, 1, 9, 4, 12, 7, 15, \_\_, \_\_

⑫ 15, 22, 18, 26, 22, 31, 27, \_\_, \_\_

⑬ 6, 16, 25, 33, 40, 46, 51, \_\_, \_\_

⑭ 6, 12, 7, 14, 9, 18, 13, \_\_, \_\_

⑮ 4, 8, 11, 22, 25, 50, 53, \_\_, \_\_

---

Score:



**16.4.2 Number Patterns 4**

① 28, 36, 29, 38, 31, 41, 34, \_\_, \_\_

② 24, 19, 27, 22, 30, 25, 33, \_\_, \_\_

③ 69, 64, 59, 53, 48, 41, 36, \_\_, \_\_

④ 26, 32, 39, 47, 56, 66, 77, \_\_, \_\_

⑤ 3, 6, 5, 10, 9, 18, 17, \_\_, \_\_

⑥ 17, 24, 30, 35, 39, 42, 44, \_\_, \_\_

⑦ 28, 34, 31, 37, 34, 40, 37, \_\_, \_\_

⑧ 86, 81, 80, 74, 73, 66, 65, \_\_, \_\_

⑨ 3, 6, 8, 16, 18, 36, 38, \_\_, \_\_

⑩ 1, 2, 3, 6, 7, 14, 15, \_\_, \_\_

⑪ 3, 6, 8, 16, 18, 36, 38, \_\_, \_\_

⑫ 93, 91, 87, 81, 73, 63, 51, \_\_, \_\_

⑬ 3, 6, 8, 16, 18, 36, 38, \_\_, \_\_

⑭ 77, 75, 73, 70, 68, 64, 62, \_\_, \_\_

⑮ 58, 56, 61, 59, 64, 62, 67, \_\_, \_\_

---

Score: \_\_\_\_\_

**16.5 Quiz 6****16.5.1 Part A — 10 Multiple Choice Questions (1 mark each)**

1. What is the value of the third 5 in the numeral 5555?  
(A) five hundred                      (B) fifty                      (C) fifteen                      (D) five
  
2. What number is 23 less than three hundred and five?  
(A) 282                      (B) 278                      (C) 286                      (D) 273
  
3. Seven thousand, five hundred and forty three when rounded off to the nearest hundred is:  
(A) 7600                      (B) 7500                      (C) 7400                      (D) 7540
  
4. What is the remainder when 767 is divided by 5?  
(A) 1                      (B) 2                      (C) 3                      (D) 4
  
5. One quarter of 500 g equals:  
(A) 125 g                      (B) 200 g                      (C) 250 g                      (D) 400 g
  
6. What is the smallest number that can be subtracted from 80 to make the answer exactly divided by 9?  
(A) 4                      (B) 6                      (C) 7                      (D) 8
  
7. How many minutes in  $2\frac{1}{3}$  hours?  
(A) 125 minutes                      (B) 220 minutes                      (C) 140 minutes                      (D) 160 minutes
  
8. If 5 books cost \$70. How much would you pay for 8 books?  
(A) \$120                      (B) \$112                      (C) \$126                      (D) \$140
  
9. How much would you pay for 250 g of cheese at \$12 per kg?  
(A) \$3.00                      (B) \$2.50                      (C) \$2.00                      (D) \$2.25
  
10. A length of ribbon measuring 13.6 metres was cut into 8 equal pieces. How long was each piece?  
(A) 1.65 m                      (B) 1.7 m                      (C) 1.75 m                      (D) 1.8 m

**16.5.2 Part B — 10 Average Questions (2 marks each)**

1. At school there was a spelling test of 20 words each weekday. Alice scored 12 out of 20 on Monday and improved her mark one each day. What was her total score for the whole week?

---

---

---

---

2. If  $\frac{3}{4}$  of a number is 126, what is that number?

---

---

---

---

3. In the first hour we travelled 50 km, in the second hour 60 km and in the third hour 70 km. What was our **average** speed?

---

---

---

---

4. How many 750 mL bottles of milk would you have to buy to have exactly 12 Litres?

---

---

---

---

5. If three apples balance a grapefruit and one apple balances three kiwi fruits, how many kiwi fruits balance two grapefruits?

---

---

---

---

6. The twins Emily and Clement collected stamps. Emily has 325 and Clement has 52 more than his sister. How many more stamps must the twins collect to have a combined collection of 800?

---

---

---

---

7. A book and a pen cost a total of \$22.50. If the pen cost \$2.50 more than the book, how much does the book cost?

---

---

---

---

8. A clock gains 90 seconds each hour. If it shows the correct time at 2:00 p.m. What time will it show on the same time the next day?

---

---

---

---

9. A CD player has a price marked \$125 was sold on a 20% discount. How much did I pay for this CD player ?

---

---

---

---

10. If 7G9X means GOAT, what does X97 means?

---

---

---

---

**16.5.3 Part C — 10 Extension Questions (3 marks each)**

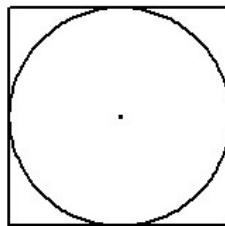
1. Change an exam mark of 68 out of 80 to a percentage.

---

---

---

2. How many axes of symmetry would the following figure have?



---

---

---

3. Perth is 2 hours behind Sydney and New Zealand is 2 hours ahead of Sydney. What time will it be in Perth when is 8:00 a.m in New Zealand?

---

---

---

---

4. If Ricky visits the fruit market and buys 2 kg of potatoes which are \$2.40 per kg, 2 kg of carrots at \$1.80 per kg and 3 muskmelons at \$1.50 each, how much change would he get from two ten dollar notes?

---

---

---

---

5. A laser printer has a price marked \$250. I paid \$212.50 for it. How much discount did I have? (write your answer in percentage)

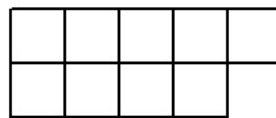
---

---

---

---

6. How many squares can you find in the following figure?



---

---

---

---

7. Jessica and her brother Ray collect stamps. Jessica has 15 more stamps than her brother, and together they have 79. How many stamps does Ray have?

---

---

---

---

8. If you have 6 black and 4 white socks in your drawer and the room is dark. What is the least number of socks you must take out of your drawer to be certain that you have a pair of the same colour?

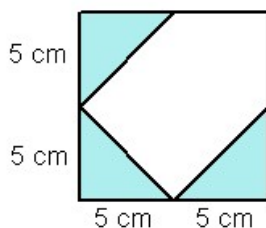
---

---

---

---

9. What fraction of the square below is shaded?




---



---



---

10. All integers are arranged in 6 columns as shown. In which column will 88 be in both cases?

(a)

A	B	C	D	E	F
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19					

---



---



---

(b)

A	B	C	D	E	F
1	2	3	4	5	
	10	9	8	7	6
11	12	13	14	15	
	20	19	18	17	16

---



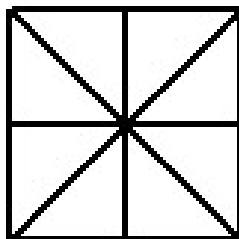
---



---

**16.5.4 Part D — 8 Challenging Questions (5 marks each)**

1. How many triangles of all sizes can you find in the figure shown below:



---

---

---

---

---

2. At North Ryde Public School there are 6 tennis teams in the junior division. How many matches must there be for all teams to play each other once?

---

---

---

---

---

3. If a  $1\frac{1}{2}$  kg of chocolate cost \$12, how much will 500 g of chocolate cost?

---

---

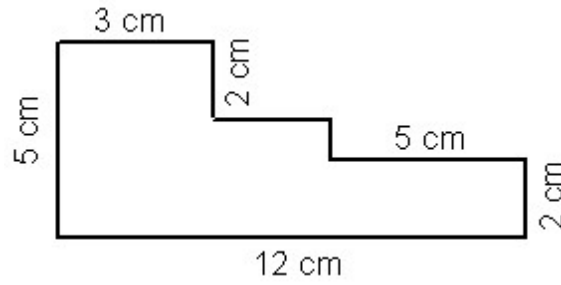
---

---

---



4. Find the perimeter and area of the figure shown below:



---

---

---

---

---

---

---

5. A product line can make 75 toy cars in 30 minutes. At this rate, how long will it take to make 200 toy cars?

---

---

---

---

---

---

---

6. How long will it take Keith to walk 5 kilometres if he walks 40 metres in 25 seconds?

---

---

---

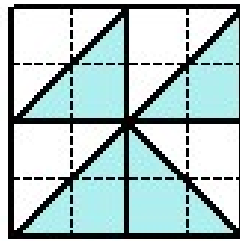
---

---

---

---

7. What fraction of the square is unshaded?




---



---



---



---



---



---

8. What is most likely the number needed to complete the pattern in the table?

2	3	1	5	4	7	6
9	13	5	21	17	29	

---



---



---



---



---



---