

Year 4 Term 4 Homework

Student Name: _____	Grade: _____
Date: _____	Score: _____

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6 Year 4 Term 4 Week 6 Homework

6.1 Topic 1 — Ratio

Exercise 6.1.1

1. A floor tile uses 5 grey tiles for every 4 white tiles.

(a) If 200 grey tiles are used, how many white tiles are there?

(b) If there are 315 tiles altogether, how many grey tiles are used?

2. If I can pour 7 glasses of juice from 1.5 litres of orange drink:

(a) how many litres of orange drink did I have if 35 glasses of juice were poured?

(b) how many glasses of juice can I pour from 9 litres?

3. The ratio of the number of small marbles to the number of large marbles in a box is 5:9. Each small marble weighs 30 g. Each large marble weighs 50 g. The total mass of these marbles is 2400 g. Find the total number of small and large marbles in the box.

6.2 Topic 2 — Rate**Exercise 6.2.1**

1. Michael walks 35 m in 20 seconds. If he walks at the same speed, how far will he walk in one and a half hours?

2. The average sailing speed of a boat is 800 metres every minute. How far can it sail in $\frac{5}{6}$ hour? Give your answer in kilometres.

3. A train is travelling at a constant speed of 64 km/h.

(a) How far does it travel in 3 and a half hours?

(b) If it travels 320 km, how long is it travelling?

4. A printer can print 20 copies in 8 seconds.

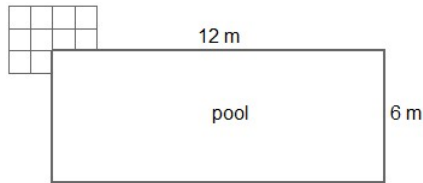
(a) At this rate, how many copies can it print in 4 minutes?

(b) How long will it take to print 300 copies?

6.3 Topic 3 — Measurements

Exercise 6.3.1

1. 50 cm by 50 cm concrete slabs are laid around a large rectangular swimming pool. How many slabs are needed altogether to completely surround the pool?

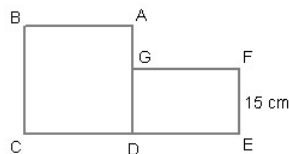


2. A rectangular tank, 20 cm by 30 cm by 15 cm, is $\frac{3}{4}$ filled with water.

(a) How many litres of water are there in the tank?

(b) How many more litres of water are need to fill up the tank to the brim?

3. ABCD is a square. DEFG is a rectangle. The length of EF is 15 cm. D is the midpoint of CE. The perimeter of the entire figure is 150 cm. Find the area of the square ABCD.



6.4 Topic 4 — Fractions**Exercise 6.4.1**

1. A book is $2\frac{1}{4}$ cm thick. David has 7 such books. What is total thickness of these books?

2. Graham has \$800. He spent $\frac{3}{8}$ of his money on Thursday and then $\frac{3}{10}$ on Friday. How much had he left?

3. Adam has $\frac{11}{12}$ kg of cheese. Carol has $\frac{1}{4}$ kg of cheese less than Adam. How many kilograms of cheese do they have altogether?

4. Jenny bought $\frac{3}{8}$ kg of beef. Mary bought $\frac{1}{2}$ kg more beef than Jenny. How much beef had they altogether?

5. The cost of a ring is $\frac{4}{9}$ of the cost of a watch. If the watch costs \$275 more than the ring, find the total cost of the two items.

6.5 Problem Solving

Exercise 6.5.1 Digit puzzles

1. How many 2-digit numbers can be formed using 2, 3 and 4 if the digits can not be repeated?

2. How many 2-digit numbers can be formed using 3, 4, 5 and 6 if the digits can be repeated?

3. How many 3-digit numbers can be formed using 3, 4 and 5 if the digits cannot be repeated?

4. How many 3-digit numbers can be formed using 4, 5, 6 and 7 if the digits can be repeated?

5. How many 4-digit numbers can be formed using 4, 5, 6, and 7 if the digits can be repeated?

6. How many 4-digit numbers can be formed using 4, 5, 6, 7 and 8 if the digits cannot be repeated?

7. The six-digit number 345AA7 is divisible by 9. Find the possible value(s) of the digit A.

6.6 Diagnostic Test

1. The cost of a bed is $\frac{4}{5}$ more than the cost of a table. If the table costs \$336 less than the bed, find [5]
the cost of the bed.

1. _____

2. Telegraph poles are placed 85 m apart. How many metres will there be between the first and the [5]
tenth telegraph poles?

2. _____

3. Water is dripping from a hole in a water tank at a rate of 40 mL per minute. How much water will [5]
flow out from the tank in one and a half hours?

3. _____

4. There are 38 people in a restaurant. 28 drink coffee and 18 drink tea. Everyone has either one or [5]
both of the drinks. How many people have both?

4. _____

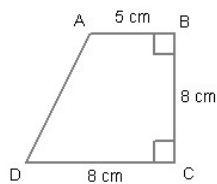
5. How many 2-digit numbers can be formed using 3, 4, 5 and 6 if the digits cannot be repeated? [5]

5. _____

6. How many 4-digit number can be formed using 6, 7, 8, and 9 if the digits cannot be repeated? [5]

6. _____

7. In the diagram, angle B and Angle C are right angles. Find the area of ABCD in square centimetres. [5]



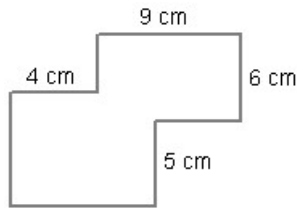
7. _____

8. What number is $\frac{3}{4}$ of the way from 3 to 15? [5]

8. _____

9. What is the perimeter in centimetres of the figure shown below?

[5]



9. _____

10. The product of two whole numbers is 48. The average of the two numbers is 8. Find the smallest of the two numbers. [5]

10. _____

11. The average of four consecutive even numbers is 15. Find the largest of the four numbers. [5]

11. _____

12. What number multiplied itself is equal to the product of 6 and 24? [5]

12. _____

13. A furniture removalist delivers 36 pieces of furniture on the one trip. At the first place he unpacks 1 piece of furniture, at the second he unpacks 2 pieces, at the third 3, and so on. How many stops will he make? [5]

13. _____

14. Eight people at a restaurant receive a total bill of \$288. They decide to share the bill equally but two of them have left their money at home. How much more than the others must each pay? [5]

14. _____

15. We could see the train in the distance. It was 27 km away and we know that it was travelling at 6 km each 10 minutes. how many minutes would it take to reach us at that rate? [5]

15. _____

16. David earned a commission of 6% on \$72 and Sam earned a commission of 4% on \$96. Who earned more and by how much? [5]

16. _____

17. Twenty four equal squares of sides 2 cm are placed together so that their sides touch. By rearranging them you can get figures with the same area but with different perimeters. What would be the least perimeter possible? [5]

17. _____

18. What number must be placed in each box to make the number statement true? [5]

$$\frac{1}{2} \times (2 \times \boxed{?} + 8) = 3 \times \boxed{?} - 8$$

18. _____

19. Joe collects stamps. Each day he adds 5 stamps to his collection. At the end of five days he has 60 stamps. How many stamps does he have at the end of 10 days? [5]

19. _____

20. An odd number between 301 and 370 has three different digits. If the sum of its digits is five times the hundreds digit, find the number. [5]

20. _____