

Year 4 Term 3 Homework

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

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3 Year 4 Term 3 Week 3 Homework

3.1 Topic 1 — Area

1. Change the units in brackets:

(a) $100 \text{ cm}^2 = \text{_____} (\text{m}^2)$.

(b) $0.25 \text{ m}^2 = \text{_____} (\text{cm}^2)$.

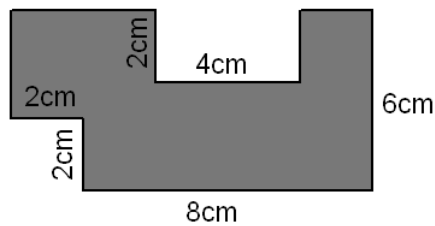
(c) $0.02 \text{ m}^2 = \text{_____} (\text{mm}^2)$.

(d) $1250 \text{ mm}^2 = \text{_____} (\text{cm}^2)$.

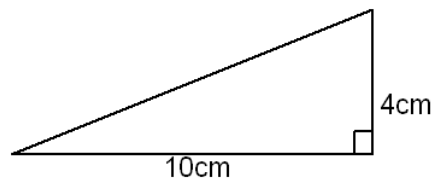
(e) $1750 \text{ mm}^2 = \text{_____} (\text{m}^2)$.

2. Find the area of the following shapes:

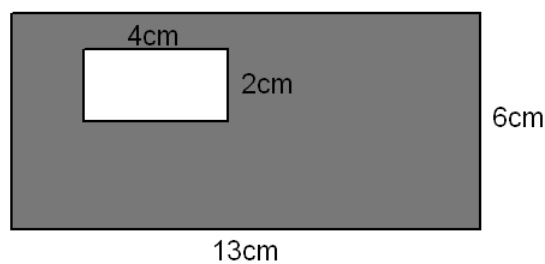
(a) Area = _____ cm^2 .



(b) Area = _____ cm^2 .



(c) Area = _____ cm^2 .



3.2 Topic 2 — Volume

1. Change the units in brackets:

(a) 1.12 Litres = _____ (cm^3).

(b) 12000 cm^3 = _____ (Litres).

(c) 1.12 m^3 _____ (Litres).

(d) 102 mL = _____ (cm^3).

(e) 12000 mL _____ (Litres).

2. How many 150 mL glasses can be filled from a 1.5 L jug?

3. One glass holds 135 mL and another holds 0.2 L. How many more millilitres does the large glass hold?

4. Mary has a 4.5 L bucket full of water. How many 250 ml bottles can she fill with water?

5. How many $1\frac{1}{2}$ L bottles can be poured into a 36 L barrel?

6. What is the capacity of the water tank with a dimension of 50 cm by 70 cm by 120 cm. (give your answer in litres)

7. Mike poured 250 mL of soft drink from an 1.75 L bottle. How many more drinks of the same size he has before the bottle is empty?

3.3 Topic 3 — Mass

1. Change the units in brackets:

(a) $1250 \text{ g} = \text{_____} (\text{kg})$.

(b) $0.025 \text{ kg} = \text{_____} (\text{g})$.

(c) $4.505 \text{ kg} = \text{_____} (\text{g})$.

(d) $250 \text{ mL water} = \text{_____} (\text{g})$.

(e) $0.75 \text{ of } 8 \text{ kg} = \text{_____} (\text{g})$.

2. What mass must be added to $1\frac{1}{2} \text{ kg}$ to make $4 \text{ kg } 150 \text{ g}$?

3. A box of biscuits has a mass of 350 g . The mass of the packaging is 53 g . What is the mass of the biscuits?

4. Keith buys 6 kg of fish for $\$26$. How much would he pay if he buys only 750 g of fish?

5. Joe bought a box of biscuits with mass of 500g . Jessica ate 80 g , David ate 120 g and Linda ate 96 g . What is the mass of the biscuits left?

6. A cardboard carton (250g) holds 12 packets of biscuits. If each packet has a mass of 250 g . what is the total mass of the box of biscuits.

7. How many chocolate bars each weighing 125 g can be made from a 75 kg batch of chocolate?

3.4 Topic 4 — Temperature

1. Mum set the oven temperature to 220°C , after 30 minutes she then turned it down by 50°C . What is the temperature now?

2. The Weather Bureau recorded a temperature of 26°C in the city but in Campbelltown area it was 8°C higher. What was the temperature there?

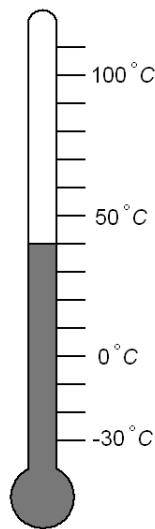
3. Which is the highest temperature?

(a) a warm day, (b) body temperature, (c) tap water. (d) a glass of cool drink.

4. What is body temperature of a sick child?

(a) 39°C , (b) 37°C , (c) 31°C , (d) 45°C ,

5. For the thermometer shown below, answer the following questions:



(a) What is the temperature range of this thermometer? _____

(b) What temperature does this thermometer show? _____

(c) If the temperature is dropped 50°C , what is the new temperature? _____

3.5 Problem Solving (Averaging)

1. Find the average of first five consecutive numbers;

2. Find the average of first nine consecutive numbers;

3. Find the average of first seven consecutive odd numbers;

4. Find the average of first eight consecutive even numbers

5. David has an average of 84 marks for his first 4 math tests. If he has 89 marks for the fifth test, what is the average mark for these five tests?

6. The average temperature for five consecutive days is 22°C .. If the temperature is 24°C , 16°C , 21°C , and 18°C on the first four days, what is the temperature on the fifth day?

7. The average age of a group of five children is 8 years. A 26-year old teacher joins them. What is the new average age of all six?

8. In the three math tests John got 73, 76 and 80. What mark will he need in the next test in order to have an average score of 80 for all four tests?

3.6 Quiz 3**3.6.1 Part A**

1. True or false?

(a) $(5 + 4) + 3 = 5 + (4 + 3)$ _____ .

(b) $(5 + 4) - 3 = 5 + (4 - 3)$ _____ .

(c) $(5 - 4) + 3 = 5 - (4 + 3)$ _____ .

(d) $(5 - 4) - 3 = 5 - (4 - 3)$ _____ .

(e) $(5 \times 4) \times 3 = 5 \times (4 \times 3)$ _____ .

(f) $(5 \div 4) \div 3 = 5 \div (4 \div 3)$ _____ .

2. Evaluate $30 + 3 \times 4 - 2 =$ _____ .

3. Evaluate $3.5 \times 6 + 12.5 \times 5 =$ _____ .

4. Evaluate $12 \div 6 \times (2 + 4) =$ _____ .

5. What is 349059 rounded off to the nearest hundred? _____ .

6. There were 8050 people at a football match. 4800 were men, 2010 were women and the rest were children. How many children were at the match?

7. A farmer has 2500 ducks. He has 320 less chickens than ducks. How many chickens and ducks does he have altogether?

8. There are 950 students in North Ryde Public School, 36 more girls than boys. How many girls are in the school?

3.6.2 Part B

1. The difference between the minimum and maximum temperature was 18°C . If the maximum was 22°C what was the minimum temperature?

2. A packet of sugar has a mass of $2\frac{1}{2}$ kg and a packet of salt has a mass of 1250 g. What is the total weight of 4 packets of sugar and 3 packets of salt?

3. Three boys were left \$10,000 in their father's will. The eldest was left \$100 more than each of the other two sons. How much money did each of the sons receive?

4. A box full of apples weighs 39 kg. How many kg of apples are there in 80 boxes if an empty box weighs 4 kg?

5. Which compass point would you reach if you:

(a) Faced NW then turned one right angle to the right _____ .

(b) Faced SE and turned one and a half right angle to the left _____ .

(c) Faced SW and turned two right angles to the right _____ .

(d) Faced NE and turned half a right angle to the right _____ .

3.6.3 Part C

1. True or false:

(a) 100 cL of sugar weighs the same as 100 cL of flour. _____ .

(b) 100 litres of water weighs the same as 100 litres of flour. _____ .

(c) 1 kg of salt takes up less space than 1 kg of sugar. _____ .

(d) 1 kg flour weighs more than 1 kg of salt. _____ .

(e) 100 cm cube made from wood takes up less space than a 100 cm cube made from marble.

2. If square ABCD has an area of $64 m^2$ and E, F, G and H are the mid points of the sides. What is the area of the square EFGH?

3. A rectangular pool measures 12 metres by 10 metres and is bordered by a concrete path 1.5 m wide. How many square metres are in the surface area of the concrete path?

4. The area of certain rectangle is $8 cm^2$. If each dimension is double, what is the area of the new rectangle?

5. Bubbletown has 8624 inhabitants, which is 456 less than Campbelltown has. If 1238 people moved from Campbelltown to Bubbletown, which town would have more people and how many more?

3.7 Challenging Problems

1. The average of five numbers is 8. If one of the five numbers is removed, the average of the four remaining numbers is 9. What is the value of the number that was removed?

2. The product of two numbers is 243 and their quotient is 3. What are the numbers?

3. The average of 20 test scores is 78. The average of the first nine tests is 79, and the average of the last ten tests is 77. What was the score for the tenth test?

4. A rectangular container is half-filled with 56 cubes, each of side 4 cm. Find the volume of the container.
