Year 5 Term 1 Homework

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

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6 Year 5 Term 1 Week 6

6.1 Topic 1 — Missing Numbers

Exercise 6.1.1 Fill in the missing numbers

1. _____ $\times 10 = 230$
2. $130 \times$ _____ $= 2600$
3. $445 \times 10 =$ _____
4. $75 \times$ _____ $= 7500$
5. $27 \times$ _____ $= 27000$
6. _____ $\times 100 = 2200$
7. _____ $\times 100 = 7500$
8. $120 \times 100 =$ _____
9. $85 \times 100 =$ _____
10. $840 \div 10 =$ _____
11. $7200 \div 100 =$ _____
12. $9600 \div 100 =$ _____
13. $1720 \div 10 =$ _____
14. $8600 \div$ _____ $= 86$
15. _____ $\times 1000 = 37000$

Exercise 6.1.2 Complete the statements

1. *7479 < X < 7484* *X :* _____
2. *2.5 < Y < 3.1* *Y :* _____

6.2 Topic 2 — Decimal

Exercise 6.2.1 Write each of the following in ascending order (from smallest to largest)

1. *5.26, 2.65, 6.25, 5.62 and 6.52* _____
2. *7.35, 3.57, 5.37, 5.73 and 7.53* _____
3. *1.023, 1.032, 1.302 and 1.203* _____
4. *0.012, 0.021, 0.201 and 0.102* _____

Exercise 6.2.2 Write each of the following in descending order (from largest to smallest)

1. *1.23, 2.13, 2.32 and 3.21* _____
2. *5.15, 5.51, 1.55 and 5.11* _____
3. *0.212, 0.122, 0.221 and 0.102* _____
4. *45.67, 54.76, 65.47, 56.74 and 47.65* _____

Exercise 6.2.3 Write these numbers as decimals.

1. $\frac{37}{100}$ = _____
2. $\frac{89}{10}$ = _____
3. $75 + \frac{7}{10}$ = _____
4. $2\frac{3}{4}$ = _____

Exercise 6.2.4 Write these decimals as fractions.

1. *3.01* = _____
2. *29.8* = _____
3. *101.101* = _____
4. *30.3* = _____

6.3 Topic 3 — Fractions

Exercise 6.3.1 Write these decimals as mixed numbers or fractions.

1. *8.08 =* _____
2. *92.80 =* _____
3. *0.62 =* _____
4. *0.0005 =* _____
5. *50.2 =* _____

Exercise 6.3.2 Compare the following fractions

1. $\frac{3}{14}$ _____ $\frac{2}{7}$
2. $\frac{4}{9}$ _____ $\frac{3}{7}$
3. $\frac{12}{36}$ _____ $\frac{5}{25}$
4. $\frac{32}{68}$ _____ $\frac{56}{72}$
5. $\frac{8}{36}$ _____ $\frac{14}{35}$

Exercise 6.3.3 Express these quantities as decimals.

1. *786 ml =* _____ *L*
2. *27 kg 100 g =* _____ *kg*
3. *3 hours 6 min =* _____ *hours*
4. *3 m 640 mm =* _____ *m*
5. *12 kg 34 g =* _____ *kg*

Exercise 6.3.4 Circle the numbers which are greater than 1.

$\frac{8}{7}$, *0.901* , $\frac{19}{17}$, *-1.209* , $-\frac{6}{4}$, *1.002* , $\frac{27}{25}$, $1\frac{1}{12}$

6.4 Topic 4 — Percentages (%)

The word per cent comes from Latin word **per centum** which means out of 100.

Exercise 6.4.1 Change the following percentages to fractions in simplest form:

1. *21% =* _____
2. *45% =* _____
3. *84% =* _____
4. *18% =* _____
5. *100% =* _____
6. *120% =* _____

Exercise 6.4.2 Change the following percentages to decimals:

1. *19% =* _____
2. *35% =* _____
3. *86% =* _____
4. *2% =* _____
5. *0.5% =* _____
6. *105% =* _____

Exercise 6.4.3 Change the following decimals to percentages:

1. *0.56 =* _____
2. *0.14 =* _____
3. *0.4 =* _____
4. *0.05 =* _____
5. *1.5 =* _____
6. *2 =* _____

6.5 Problem Solving (Percentages)

Exercise 6.5.1

1. *David obtained 60 out of 75 marks in a math test. What percentage was this?*

2. *Price of a LCD TV is $1500. Discount 20%. What is the discount?*

3. *John played 8 games, winning 6 of them. What percentage of games did he win?*

4. *30% of a number is 12. What is the number?*

5. *Out of 600 students, 25% play sport during the weekend. How many students play sport during the weekend?*

6. *75% of a class of 28 can swim. How many in the class can swim?*

7. *There are 200 marbles in a bag. 60 are blue, 60 are red and the rest of them are black and white. What percentage of the total are black and white?*

8. *In a workshop, 15 out of 1250 MP3 players were found to be defective. What percentage of the total was defective?*

6.6 Test Paper 6

6.6.1 Part A — Quick Questions

1. What is the value of 6 in 1635? _____
2. Write in our numerals MCMXLII. _____
3. How many metres are there in 3.5 km? _____
4. $4^3 - 24 =$ _____
5. One hundred thousand more than 95867. _____
6. Cost of 400 g at \$30 per kilogram. _____
7. Millimetres in 4.65 metres. _____
8. What must be added to \$85 to make \$200? _____
9. What is the angle sum of a quadrilateral? _____
10. The sum of three times the number and 5 is 17. Find the number. _____
11. How many hours in a week? _____
12. Change $\frac{3}{5}$ to a decimal? _____
13. How many fours are in 36? _____
14. $8^2 \times 10 =$ _____
15. $\frac{1}{7}$ of 98 _____
16. Find 0.5 of \$12? _____
17. How many sides does an octagon have? _____
18. From 6 times 8 subtract the sum of 11 and 7. _____
19. Change $\frac{2}{5}$ to a percentage. _____
20. Reduce $\frac{32}{72}$ to the lowest terms. _____

21. Multiply all the even numbers less than 7. _____

22. Find the average of 7, 9, 11 and 17. _____

23. Is 59 a prime number? _____

24. How many faces has a triangular prism? _____

25. Add the product of 6 and 9 to the sum of 24 and 26. _____

26. $135 \times 0 \times 57 =$ _____

27. $(16 + 24) \times 9 =$ _____

28. $(8 \times 9) + (7 \times 9) =$ _____

29. How many cents are there in \$12.35 _____

30. How many grams are there in 3 kg? _____

31. How many litres in 45 000 ml? _____

32. $\$32.55 \times 8 =$ _____

33. Write 1967 as a Roman numeral. _____

34. How many digits has 4683? _____

35. What is the value of 5 in 25760? _____

36. $25 \times 4 \times 63 =$ _____

37. $201 + 563 - 1 =$ _____

38. $53 \times 41 \times 139 \times 0 \times 8 \times 13 =$ _____

39. $5 \times 2^3 \times 15 =$ _____

40. $4^3 \times 10^2 =$ _____

41. Increase \$60 by 50%. _____

42. Decrease \$120 by 10%. _____

6.6.2 Part B — Average Questions

1. A person has twice as many two-dollar coins in his pocket as one-dollar coins. The total value of these coins is \$45. How many coins of each kind has he?

2. When a certain number is added on to itself, the result is 24. What is the number?

3. When a fraction is added on to itself, the result is 1. What is the fraction?

4. When a certain number is multiplied by 7 and 2 is added, the result is 37. What is the number?

5. A student scored 68 marks out of 80. What percentage did he get?

6. What percentage is 24 out of 96?

7. A train travelled 127 km in one and half hours for the first part of a journey, then it stopped for 12 minutes. It took 65 minutes to cover the remaining 102 km. How much time did the train take to do the whole journey?

8. Linda bought a length of material for \$48.60. If it cost \$1.80 per metre. How many metres did she buy?

6.6.3 Part C — Extension Questions

1. It takes $5\frac{1}{2}$ seconds for an electric saw to cut through a log of wood. How many seconds would it take for the saw to cut the wood into 5 equal pieces?

2. A box has a rectangular base measuring 8 cm by 12 cm. What must be its height be if its volume is 528 cm^3?

3. 16 boxes of apples are bought at the market for \$72. How many boxes could be bought with \$126?

4. What number must be placed in the boxes so that the number sentence is true?

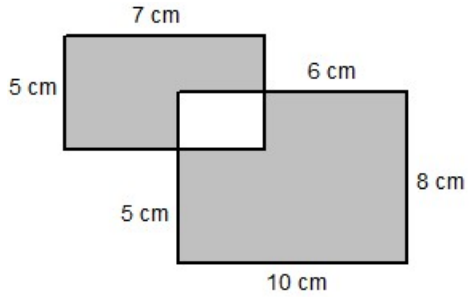
$$6 \times (\boxed{?} - 1) + 2 \times \boxed{?} = 70$$

5. The average of 6 numbers is 6. A seventh number is added to the first six numbers. The average of these seven numbers is 12. What number must be the seventh number?

6. A container is 24 cm long, 65 cm wide and 0.5 m deep. How much water could it hold?

7. A ship is sailing on a bearing of NE. It changes direction and sails on a bearing of NW. Through what angle did it turn?

8. As shown below, the length of each segment in the overlapping rectangles is given. Find the difference of the areas of the shaded parts.

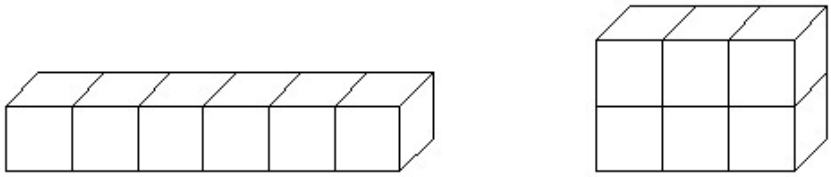


9. Paul has half as many lollies as Jennifer. Jennifer had half as many as Charles. Charles has 12 times as many as Susan. Susan has 4 lollies. How many lollies do they have altogether?

10. Sam can buy marbles at 8 for \$0.50 and can sell them at 6 for \$0.50. How many marbles must Sam sell in order to make a profit of \$10.00?

6.6.4 Part D — Challenging Problems

1. A student has 6 cubes each of side 1 cm. The student arranges them in two different ways as shown in the diagram. What would be the difference in surface area of the two configurations?



2. A water tank is $\frac{2}{5}$ full of rainwater. It would take another 48 L of water to fill it. What is the capacity if the water tank?

3. We loaded 25% of the boxes. That left 180 boxes. How many boxes were there originally?

4. The rectangle in the diagram is 18 cm long and 8 cm wide. What is area of the shaded part?