

Mathematics

STANDARD 4

NUMBER: WHOLE

NUMBER OPERATIONS

Students will:

Solve problems using whole numbers involving the four operations.

Develop and apply mental strategies to solve problems involving whole numbers.

TEACHING POINTS

- The four operations
- Mental Strategies – Double and half facts
 - Related facts
 - Square and square roots
 - Compensation
 - Compatible numbers

EXERCISE 1

Fill in a number in each box which would make the statement true.

$$1. \quad 1425 \div 25 = (\square \div 25) + 1$$

$$2. \quad 658 - 200 = \square - 200 - 2$$

$$3. \quad 2\,845 + 698 = 2\,845 + \square - 2$$

$$4. \quad 851 \times 15 = 851 \times \square + 851 \times 5$$

$$5. \quad 463 \times 11 = 463 \times 10 + \square$$

$$6. \quad 53 \times 18 = 106 \times \square$$

$$7. \quad 729 \div 9 = (729 \div 3) \div \square$$

$$8. \quad 243 \div 9 = 81 \div \square$$

$$9. \quad 250 \times 3 = (25 \times 3) \times \square$$

$$10. \quad 980 \div 4 = 490 \div \square$$

EXERCISE 2

Solve the following problems.

1. Kishan scores 4 035 points in a video game and Harry scored 6 832 points in the same game. How many more points did Harry score than Kishan?
2. Allan collected 325 shells at the beach.
His sister collected 470.
How many shells did they have altogether?
3. A sum of money was shared equally among 5 people.
Each person got \$437.
What was the sum of money that was shared?
4. The number of kilometers covered by a car is 5 times the distance covered by a bicycle.
The car covered 2 390 km.
What distance was covered by the bicycle?
5. Michelle earned \$350 on Saturday and she earned \$100 more than her Saturday salary on Sunday.
What was her total earnings for the two days?
6. A car company had 5 820 vehicles in stock.
The company sold 1 231 of the vehicles and rented an equal number of their vehicles.
How many vehicles remained at the company?
7. Two numbers differ by 24 and their sum is 286.
What is the larger number?
8. A shop sells bicycles and tricycles.
The shopkeeper found that when he counted the number of wheels in his shop, he had 138.
He found also that he had 11 more tricycles than bicycles.
How many tricycles did he have in the shop?

ACTIVITY

Create a word problem for each of the following number sentences.

Example

$$247 + 426 = ?$$

Anna had \$247 and Riad had \$426. How much money did they have altogether?

1. $135 + 645 = ?$
2. $845 - 249 = ?$
3. $625 \div 5 = ?$
4. $120 \times 3 = ?$
5. $1\,478 - (263 + 491) = ?$
6. $2\,056 - (431 \times 2) = ?$
7. $4\,359 - (460 - 380) = ?$

EXERCISE 3

Place one of the numbers at the top of the table in each of the missing spaces.

NUMBERS																																										
$\sqrt{25}$	3^2	8	9		4^2		12^2	25	$\sqrt{49}$																																	
$\sqrt{121}$	7^2	6^2		81		10	11^2	8^2																																		
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ANSWERS

EXERCISE 1 ANSWERS

$$1. \quad 1425 \div 25 = (\boxed{1400} \div 25) + 1$$

$$2. \quad 658 - 200 = \boxed{660} - 200 - 2$$

$$3. \quad 2\,845 + 698 = 2\,845 + \boxed{700} - 2$$

$$4. \quad 851 \times 15 = 851 \times \boxed{10} + 851 \times 5$$

$$5. \quad 463 \times 11 = 463 \times 10 + \boxed{463}$$

$$6. \quad 53 \times \underline{18} = 106 \times \boxed{9}$$

$$7. \quad 729 \div 9 = (729 \div 3) \div \boxed{3}$$

$$8. \quad 243 \div 9 = 81 \div \boxed{3}$$

$$9. \quad 250 \times 3 = (25 \times 3) \times \boxed{10}$$

$$10. \quad 980 \div \underline{4} = 490 \div \boxed{2}$$

EXERCISE 2 ANSWERS

1. 2 797
2. 795
3. \$2 185
4. 478 km
5. \$800
6. 3 358
7. 155
8. 32

EXERCISE 3 ANSWERS

NUMBERS									
$\sqrt{25}$	3^2	8	9	4^2	10	12^2	25	$\sqrt{49}$	
$\sqrt{121}$	7^2	6^2	81	10	11^2	8^2			
16	4^2			$\sqrt{100}$	10		9^2	81	
121	11^2			7	$\sqrt{49}$		36	6^2	
5	$\sqrt{25}$			49	7^2		144	12^2	
$\sqrt{64}$	8			5^2	25		$\sqrt{81}$	9	
9	3^2			64	8^2		11	$\sqrt{121}$	

