

Name: \_\_\_\_\_

## Problem solving Worksheet

### Arithmetic

Use your notebook to work out the questions and put the answer in the textbox provided.

1.  $1657 + 918$       Answer: \_\_\_\_\_
2.  $752 - 467$       Answer: \_\_\_\_\_
3.  $315 \times 9$       Answer: \_\_\_\_\_
4.  $392 \div 7$       Answer: \_\_\_\_\_
5.  $348 + 567$       Answer: \_\_\_\_\_
6.  $3489 - 1625$       Answer: \_\_\_\_\_
7.  $674 \times 5$       Answer: \_\_\_\_\_
8.  $1244 \div 4$       Answer: \_\_\_\_\_
9.  $3527 + 603 + 248$       Answer: \_\_\_\_\_
10.  $7609 - 4295$       Answer: \_\_\_\_\_
11.  $5841 \times 8$       Answer: \_\_\_\_\_
12.  $931 \div 7$       Answer: \_\_\_\_\_

### Factors and H.C.F.

1. State the factors of 16. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
2. State the factors of 70. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
3. State the factors of 80. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
4. Determine the Highest Common Factor (HCF) of the following numbers.  
 $32 = 2 \times 2 \times 2 \times 2 \times 2$   
 $48 = 2 \times 2 \times 2 \times 2 \times 3$   
  
H.C.F. of 32 and 48 = \_\_\_\_\_  $\times$  \_\_\_\_\_  $\times$  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

Name: \_\_\_\_\_

Multiplies and L.C.M.

1. State the multiples of 12. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
2. State the multiples of 7. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
3. State the multiples of 9. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
4. Use Prime Factorization to find the L.C.M. of 48 and 60.

|  | 48 | 60 |
|--|----|----|
|  |    |    |
|  |    |    |
|  |    |    |
|  |    |    |
|  |    |    |
|  |    |    |

L.C.M. of 48 and 60 = \_\_\_\_\_ × \_\_\_\_\_ × \_\_\_\_\_ × \_\_\_\_\_ × \_\_\_\_\_ × \_\_\_\_\_ = \_\_\_\_\_

Squares and Square Roots - Use your notebook to work out the following questions.

1. State a square number between 5 and 10. Answer: \_\_\_\_\_
2. State a square number more than 40 but no less than 60. Answer: \_\_\_\_\_
3. What is the value of  $\sqrt[2]{4}$ . Answer: \_\_\_\_\_
4. These two signs indicate square root symbols:  $\sqrt{\quad}$   $\sqrt[2]{\quad}$ . True or False
5. What is the value of  $\sqrt{81} + 9^2$  Answer: \_\_\_\_\_
6. State a square number between 110 and 130. Answer: \_\_\_\_\_

Name: \_\_\_\_\_

7. What is the value of  $\sqrt[3]{144} - \sqrt{121}$ .

Answer: \_\_\_\_\_

8. What is the value of  $10^2 - 7^2$ .

Answer: \_\_\_\_\_

9. What is the value of  $\sqrt{100}$  using prime factorization?

Answer: \_\_\_\_\_

10. What is the value of  $13^2 - \sqrt[2]{121}$ .

Answer: \_\_\_\_\_