

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

Date: \_\_\_\_\_

1. From the set { 2 , -4 ,  $\sqrt{3}$  , -0.18 , 1 ,  $\frac{4}{5}$  }

a) Drag and drop the numbers above to arrange in ascending order.

\_\_\_\_\_

b) From the above set of numbers, write down

i). the integers \_\_\_\_\_

ii). the irrational number(s) \_\_\_\_\_

iii). the prime number(s) \_\_\_\_\_

iv). the square number(s) \_\_\_\_\_

2. Put a check mark for each set that the number is a part of:

	Natural Number	Whole Number	Integer	Rational Number	Irrational Number	Real Number
-4						
$\frac{1}{3}$						
$\sqrt{36}$						
0.375						
$\pi$						

3. (a) Express 400 as a product of its prime factors.

	400

Be sure to list factors in  
ASCENDING ORDER.

400 = \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_

(b) Write your answer for (a) in index form.

400 = \_\_\_\_\_ x \_\_\_\_\_

(c) Evaluate:  $\sqrt{400} =$  \_\_\_\_\_

4. From the set {20, 21, 22, 23, 24, 25, 26, 27, 28} write down the

- a) multiple of 13, \_\_\_\_\_
- b) factor of 81 \_\_\_\_\_
- c) cube number \_\_\_\_\_
- d) the LCM of 4 and 14 \_\_\_\_\_
- e) the HCF of 63 and 84 \_\_\_\_\_

5. Divide the product of 44 and 25 by the sum of 27 and 28.

SHOW ALL WORKING HERE

FINAL ANSWER = \_\_\_\_\_

6. Find the missing terms in the given sequences.

- (a) 4, 8, 16, 32, \_\_\_\_\_, \_\_\_\_\_
- (b) 53, 50, 45, 38, 29, \_\_\_\_\_, \_\_\_\_\_
- (c) 1, 3, 6, 10, \_\_\_\_\_, \_\_\_\_\_
- (d) -17, -13, -9, \_\_\_\_\_, \_\_\_\_\_, 3
- (e) 2.3, 2.9, 3.5, 4.1, \_\_\_\_\_, \_\_\_\_\_

7. Evaluate:

(a)  $\sqrt{625} - 3^3$

\_\_\_\_\_ - \_\_\_\_\_

Ans = \_\_\_\_\_

(b)  $5^2 + \sqrt[3]{343}$

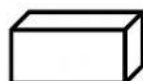
\_\_\_\_\_ + \_\_\_\_\_

Ans = \_\_\_\_\_

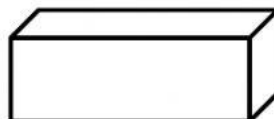
8. A warning light blinks every 6 seconds. Another warning light nearby blinks every 8 seconds. At one point, they blink together. Calculate how many seconds will elapse before they blink together again?

Ans = \_\_\_\_\_seconds

9. Calculate the largest size bucket that can be used to exactly fill a 66 litre or 84 litre tank.



66 litres



84 litres

Ans = \_\_\_\_\_litre

10. Identify the **first 5 terms** in the sequence whose nth term formula is:  $2n - 4$

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