

Solution

VII STD.

Class 07 - Admission Test

1.

(c) 0.368

Explanation:

0.368

2.

(c) 0.375

Explanation:

$$\frac{3}{8} = 3 \div 8 = 0.375$$

3.

(a) Tenth

Explanation:

The place value of 7 in the given decimal 924.75 is tenth.

4.

(b) -100

Explanation:

$$-250 + 150 = -(250 - 150) = -100$$

5.

(c) $\frac{p+q}{r+s}$

Explanation:

$\frac{p+q}{r+s}$ will be least as $p < q < r < s$ i.e, denominator is bigger than the numerator.

6.

(c) 0

Explanation:

Any number multiplied by 0 is 0

7.

(d) It is 1:20

Explanation:

$$\text{₹ } 1 = 100\text{paise}$$

$$\text{₹ } 10 = 1000\text{paise}$$

ratio= cost of a toffee : cost of a chocolates

$$= 50:1000$$

$$\frac{50}{1000} = \frac{50 \div 50}{1000 \div 50} = \frac{1}{20} = 1:20$$

8.

(c) 648 cm^2

Explanation:

$$648 \text{ cm}^2$$

9.

(b) H

Explanation:

When a vertical mirror is placed through the middle of the alphabet, it produces two parts that are symmetrical to each other.

10. (a) 3 : 1

Explanation:

$$15 : 5 = 3 : 1$$

- 11.

- (d) 55 km/h

Explanation:

Total distance = 715 km

car speed = x km/h

A/q

$$\frac{715}{x} - \frac{715}{x+10} = 2$$

$$715 \left(\frac{10}{x(10+x)} \right) = 2$$

$$x^2 + 10x = 3575$$

$$x^2 + 10x - 3575 = 0$$

$$x^2 + 65x - 55x - 3575 = 0$$

$$x(x + 65) - 55(x + 65) = 0$$

$$(x + 65)(x - 55) = 0$$

$$x = 55 \text{ km/h}$$

- 12.

- (b) 63

Explanation:

Let 1st number be 7x and 2nd number be 9x

Given, $7x + 9x = 112$

$$16x = 112$$

$$x = \frac{112}{16} = 7$$

$$\text{Hence, } 7x = 7 \times 7 = 49$$

$$9x = 9 \times 7 = 63$$

The larger number is 63

13. (a) 14 cm

Explanation:

The perimeter of an isosceles triangle is = sum of two equal side + third side

Here length of equal side = 4 cm and third side = 6 cm

$$\text{Perimeter} = 4 + 4 + 6$$

$$\text{Perimeter} = 14 \text{ cm}$$

- 14.

- (b) Will become four times

Explanation:

Let d is the diagonal of square, then area of the square

$$A_1 = \frac{d^2}{2}$$

If d becomes double, then

$$A_2 = \frac{(2d)^2}{2} = 2d^2$$

$$A_2 = 4 A_1$$

15. (a) $\frac{4}{5}$

Explanation:

A/q

$$\frac{2}{3} = 0.666$$

$$\frac{4}{5} = 0.8$$

$$\frac{3}{8} = 0.375$$

$$\frac{1}{2} = 0.5$$

$\frac{4}{5}$ is the largest fraction.

16.

(b) 0

Explanation:

Positive integer is always greater than 0.

17.

(b) a natural number

Explanation:

The sum of a natural number with a whole number is always. The all-natural number and zero make a collection of whole numbers. So the sum of natural number with the whole number is the same as the sum of two natural numbers or sum of natural number with zero. In both cases, you will get the natural number as a sum.

18.

(c) $\frac{3}{50}$

Explanation:

$$\frac{3}{50}$$

19.

(c) two lines of symmetry

Explanation:

The letter is oval in shape, so it can be cut into 2 equal halves by its two lines of symmetry.

20.

(d) xy

Explanation:

LCM of two co-prime numbers is the product of the two co-prime numbers.

21. **(a) set-square**

Explanation:

The simplest form of a set square is a triangular piece of transparent plastic (or formerly of polished wood) with the centre removed.

22.

(b) $\frac{2}{15}$

Explanation:

In like a fraction, the denominator is the same . For e.g $\frac{12}{7}$, $\frac{9}{7}$, $\frac{4}{7}$

23.

(d) 8 m

Explanation:

Diameter = 16 m

Radius = $\frac{1}{2}$ of diameter

Radius = $\frac{1}{2} \times 16 = 8$ m

Difference between diameter and radius = $16 - 8 = 8$ m

24. (a) 576 cm^2

Explanation:

576 cm^2

25.

(b) 400

Explanation:

Cars produced in the month of September = $100 + 100 + 100 + 100 = 400$

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