1) Express 2,750,389 in scientific notation.

- 27.50389×10^5
- 275.0389×10^3
- 27.50389×10^6
- 0.2750389×10^7
- 2.750389×10^6

Answer :: E

Explanation of Answer:

To express a number in scientific notation, express it as the product of a number between 1 and 10 and a power of 10. In this case, the number between 1 and 10 is 2.750389. In going from 2.750389 to 2,750,389, you move the decimal point 6 places to the right. Each move represents a multiplication by 10 and 6 moves represents a multiplication by 10^6.

2) A basketball team has won 50 games of 75 played. The team still has 45 games to play. How many of the remaining games must the team win in order to win 60% of all games played during the season?

- 20
- 21
- 22
- 25
- 30

Answer :: C

Explanation of Answer:
The team has played 75 games and will play 45 more games.

75 + 45 = 120

6O% of 120 = 0.6 x 120 = 72 The team must win 72 games, and It has already won 50 games. Therefore, the team must win 72—50 = 22 more games.

3) A rectangle and a triangle have equal areas. The length of the rectangle is 12 inches, and its width is 8 inches. If the base of the triangle is 32 inches, what is the length, in inches, of the altitude drawn to the base?

- 6
- 8
- 9
- 12
- 16

Answer :: A

Explanation of Answer:

Area of rectangle = length x width

12 X 8 = 96 sq. in.

4) A school has 18 classes with 35 students in each class. In order to reduce class size to 30, how many new classes must be formed?
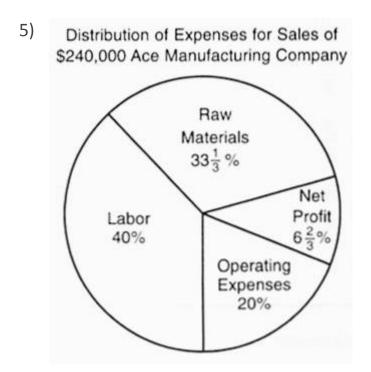
- 2
- 3
- 5
- 6
- 8

Answer :: B

Explanation of Answer:

The number of students in the school 18 x 35 = 630. If there are to be 30

students in a class, the number of
classes needed is 630 / 30 = 21.

Therefore, the number of new classes needed is 21 - 18 = 3.

5) Distribution of Expenses for Sales of
$240,000 Ace Manufacturing Company

How many dollars were spent for labor?

- $4,800
- $9,600
- $48,000
- $96,000
- $960,000

Answer :: D

Explanation of Answer:

40% of the total expenses of $240,000 vent for labor:

0.40 x $240,000 = $96,000

6)

Distribution of Expenses for Sales of
$240,000 Ace Manufacturing Company

How many dollars were spent for Operating Expenses?

- $4,800
- $9,600
- $48,000
- $96,000
- $960,000

Answer :: C

Explanation of Answer:

There are 2 ways to do this now that we know the amount spent on labor.

First, 20% of the total expenses of $240,000 vent for labor:

0.20 x $240,000 = $48,000

7) A man drives x miles the first day, y miles the second day, and z miles the

third day. The average mileage covered per day is

- (XYZ) / 3
- (XY + Z) / 3
- X + Y + Z
- (X + Y + Z) / 3
- 3XYZ

Answer :: D

Explanation of Answer:

To find the average, divide the total mileage by the total time. Total distance =
x + y + z Total time = 3 days.

8) What is the slope of the line passing through points A (5,4) and B(0,3)?

- 1 / 10
- 1 / 5
- 3 / 5
- 4 / 5
- 5

Answer :: B

Explanation of Answer:

Slope =

$Y_1 - Y_2$

$X_1 - X_2$

In this case $Y_1 = 4$, $Y_2 = 3$, $X_1 = 5$, $X_2 = 0$,

4 - 3   1

----- = ---

5 - 0   5

9) 1 kilometer =

- 10 meters
- 100 meters
- 1,000 centimeters
- 10,000 centimeters
- 1,000,000 millimeters

Answer :: E

Explanation of Answer:

1 km = 1,000 m

1 m = 100 cm,

so

1 km = 100,000 cm

1 m = 1,000 mm, so

1 km = 1,000,000 mm.

10) Which of the following pairs of points both lie on the line whose equation is 3x-y= 2?

- (3,-2) and (1,5)
- (2,4) and (3,7)
- (2,4) and (1,5)
- (2,-2) and (1,5)
- (3,7) and (3,-2)

Answer :: B

Explanation of Answer:

Test each pair: Only (2, 4) and (3, 7)

satisfy the equation.

3(2) - 4 = 6 - 4 = 2, and

3(3) - 7 = 9 - 7 = 2.

None of the other pairs work.