Decimals and Percentages Part 5

Exercise Worksheet 4.5 Solutions

1. Solve the following:

i. (2 - 3.5 x 3.5) + 7.7 = -2.55

ii. 8.5 - (9.8 + 4.7 / 5) = -2.24

iii. 7.1 + (2.3 / 9.2 - 4.5) = 2.85

iv. 6.6 (5.7 / 9.5 x 8.9) = 35.244

v. (2.6 + 9.6 - 6) x 1.9 = 11.78

vi. 5.4 - (4.9 - 2.2 x 1.4) = 3.58

vii. (5.9 - 1.4 x 9.7) + 2.5 = -5.18

viii. 5 - (8.5 + 3.1 / 5) = -4.12

ix. 2.2 + (1.9 / 1.9 - 4.3) = -1.1

x. 8.4 (2.2 / 7.9 x 7.9) = 18.48

xi. 3 - (8.9 - 5.8 x 6.6) = 32.38

xii. (7.1 + 2.1 - 8) x 6.9 = 8.28

Decimals and Percentages Part 5

Exercise Worksheet 4.5 Solutions

2. Round the following numbers to the given degrees of accuracy:

    i.   26.1345 to the nearest tenth.

        Solution: 26.1

    ii.   3.01384 to the nearest 100th.

        Solution: 3.01

    iii.   62.3184 to the nearest 1000th.

        Solution: 62.318

    iv.   2911.106 to the nearest tenth.

        Solution: 2911.1

    v.   248.83798 to the nearest 1000th.

        Solution: 248.838

    vi.   83.476 to the nearest tenth.

        Solution: 83.5

    vii.   7.1492 to the nearest 100th.

        Solution: 7.15

    viii.   35.12935 to the nearest 1000th.

        Solution: 35.129

    ix.   9.03421 to the nearest tenth.

        Solution: 9.0

    x.   24.80898 to the nearest 1000th.

        Solution: 24.809

Decimals and Percentages Part 5

Exercise Worksheet 4.5 Solutions

3. Solve the following real life problems:

i. The cost of 17kg of rice is 1365.1 Rupees. Find the cost of a bag 1kg of rice.

Solution:

Cost of 17kg of rice = 1365.1 Rupees

Divide both sides by 17kg:

Cost of 1kg of rice $= \frac{1365.1}{17}$ Rupees

= 80.3 Rupees.

ii. The cost of 25kg of pears is 2130 Rupees. Find the cost of 5kg of pears.

Solution:

Cost of 25kg of pears = 2130 Rupees

Divide both sides by 25:

Cost of 1kg of pears $= \frac{2130}{25}$ Rupees

So Cost of 5kg of pears $= 5 \times \frac{2130}{25}$ Rupees

= 426 Rupees

iii. Your CD player runs for about 19 hours on new batteries. The average length of CDs in your collection is about 1.7 hours. Calculate how many CDs you could expect to listen to using one new set of batteries. Give your answer to the nearest hundredth.

Solution:

CD player on new batteries = 19 hours

One CD = 1.7 hours

How many 1.7s are there in 19?

No. of CDs you could listen to = $\frac{19}{1.7} = 11.18$ CDs

iv. The total length of a flag pole is 35.4 metres. Suppose that the length of the pole inside the ground is 0.4 metres. What is the length of the flag pole above the ground?

Solution:

Above Ground = 35.4 – 0.4 = 35 metres

v. A man wins 20,000 Rupees in a competition. He gives 0.125 of the amount to each of his two children. He also gives 0.2 of the amount to his wife.
How much does he give away altogether?

Solution:

Each child gets = 0.125 x 20000 = 2500
Wife gets = 0.2 x 20000 = 4000

Two Children + Wife get = (2 x 2500) + 4000 = £9000