Module 1.C : Number systems, Order of operations, and Applications

SECTION 1 : Solve an application word problem involving integers.

EXERCISE 5

Fifty people work 8 hours, each earning 9 dollars per hour. If the budget allots $3960, how many more people can work a full day?

SOLUTION

Fifty people work 8 hours, each earning 9 dollars per hour. 50(8)(9) = $3,600
If the budget allots $3960, thus $3,960-$3,600 = $ 360 is left to be distributed.
One person earns 8(9) = $72 per day.
360/72 = 5, so 5 more people can work for a full day.

SECTION 2 : Apply percents to solve a word problem.

Per cent means 'per one hundred", so 30% means $\frac{30}{100}$ or 0.30.

EXERCISE 6

a) What number is 30% of 50?
b) What number is 30% more than 50?
c) What number is 30% less than 50?

SOLUTION

a) 0.30(50) = 15 (so 15 is 30% of 50)
b) 50 + 0.30(50) = 50 + 15 = 65
c) 50 – 0.30(50) = 50 – 15 = 35

MODULE 1.C - ASSESSMENT

_____9. In a hotel, twenty rooms have been designated with 15 chairs in each room. If a mover has 330 chairs, how many more rooms are needed for all the chairs?

A 30 **B** 22 **C** 15 **D** 2 **E** I do not know

_____10. What number is 15% more than 20?

A 3 **B** 30 **C** 23 **D** 17 **E** I do not know