EduSahara™ Learning Center Assignment

Grade : Class VIII, CBSE
Chapter : Comparing Quantities
Name : Compound Interest Applications
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1. The population of a city is 50000. If the rate of increase in population is 2.00% per annum, what is the population after 3 years?

(i) 53050 (ii) 53060 (iii) 53080

(iv) 53070 (v) 53040

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2. The population of a city is 30000. If the rate of decrease in population is 3.00% per annum, what is the popoulation after 4 years?

(i) 26539 (ii) 26549 (iii) 26569

(iv) 26579 (v) 26559

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3. The present value of a machine is ₹10000.00. Suppose it depreciates at the rate of 10.00% per annum, what is the value of the machine after 3 years?

(i) ₹7292.00 (ii) ₹7288.00 (iii) ₹7291.00

(iv) ₹7290.00 (v) ₹7289.00

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4. The present value of a machine is ₹10000.00. Suppose it depreciates at the rate of 7.00% per annum, what was the value of the machine 3 years ago?

(i) ₹12430.29 (ii) ₹12431.29 (iii) ₹12433.29

(iv) ₹12434.29 (v) ₹12432.29

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5. The population of a city is 80000. If the rate of increase in population is 5.00% per annum, what is the population after 3 years?

(i) 92620 (ii) 92630 (iii) 92610

(iv) 92600 (v) 92590

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6. The population of a city is 60000. If the rate of decrease in population is 6.00% per annum, what is the popoulation after 4 years?

(i) 46835 (ii) 46855 (iii) 46825

(iv) 46865 (v) 46845

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7. The present value of a machine is ₹10000.00. Suppose it depreciates at the rate of 20.00% per annum, what is the value of the machine after 4 years?

(i) ₹4097.00 (ii) ₹4098.00 (iii) ₹4096.00

(iv) ₹4094.00 (v) ₹4095.00

8. The present value of a machine is ₹17000.00. Suppose it depreciates at the rate of 13.00% per annum, what was the value of the machine 5 years ago?

(i) ₹34106.72 (ii) ₹34107.72 (iii) ₹34109.72

(iv) ₹34105.72 (v) ₹34108.72

9. Let the present value of a machine be P. If it depreciates at the rate of r% per annum, the value of the machine after n years is

(i) $P\left[1-\frac{100}{r}\right]^{n}$ (ii) $P\left[1-\frac{r}{100}\right]^{n}$ (iii) $\frac{P}{\left[1-\frac{100}{r}\right]^{n}}$ (iv) $\frac{P}{\left[1-\frac{r}{100}\right]^{n}}$

10. Let the present value of a machine be P. If it depreciates at the rate of r% per annum, the value of the machine n years ago is

(i) $\frac{P}{\left[1-\frac{r}{100}\right]^{n}}$ (ii) $P\left[1-\frac{r}{100}\right]^{n}$ (iii) $\frac{P}{\left[1-\frac{100}{r}\right]^{n}}$ (iv) $P\left[1-\frac{100}{r}\right]^{n}$

Assignment Key

1) (ii)
2) (v)
3) (iv)
4) (v)
5) (iii)
6) (v)
7) (iii)
8) (ii)
9) (ii)
10) (i)