

Finding the Original Price

If you know the discounted price of an item and the percentage of the discount, you can find the original price by using the fraction or decimal method.

EXAMPLE: A store advertised a radio on sale for \$24. This was 25% off the regular price. Find the regular price of the radio.

Original price = 100%

Sale price = $100\% - 25\% = 75\% = 0.75 = \frac{3}{4}$

Fraction Method: Original price = $\$24 \div \frac{3}{4} = \cancel{24}^8 \times \frac{4}{\cancel{3}_1} = \frac{8 \times 4}{1 \times 1} = \frac{32}{1} = \32

Decimal Method: Original price = $\$24 \div 0.75 = \32.00

Solve.

1. Ms. Franklin bought a car for \$10,540. This was 15% off the original price. What was the original price?

Answer _____

2. Katie bought a blouse for \$24. This was 20% off the original price. What was the original price?

Answer _____

3. Felipa bought a pair of sandals on sale at $33\frac{1}{3}\%$ off. She paid \$12 for the shoes. What was the original price?

Answer _____

4. Mrs. Harper bought a painting for \$60, which was 75% of its former price. What was the former price? (Do not subtract the 75% from 100%. Why?)

Answer _____

5. By paying cash, Mrs. Perkins got a 5% discount on furniture. She paid \$950 for the furniture. What would it have cost without the discount?

Answer _____

6. The school bought books for the library and paid \$970 for them, having been given a 3% discount. How much would the books have cost without the discount?

Answer _____

7. The department store had a 15%-off sale on all merchandise. They took in \$8,500 on the first day of the sale. If they had sold the same merchandise at the original price, how much would have been taken in?

Answer _____

8. The grocer settled some old accounts for 16% less than the original amounts. On this basis she collected \$1,680. What was the total of the original accounts?

Answer _____