NUMBER: percentage changes

(Given an amount after a specific percentage change, calculate the original amount)

Date: **Name:**   *http://www.learnersgrid.com*

*Solve the percentage **increase** problems below. Round answers to 2 d.p.*

[1] After adding a 13% sales tax, the new price for a book is $17.

Give the original price of the book (i.e. BEFORE adding the sales tax).

[2] After adding 16% postage & handling costs, the total cost of a pair of shoes from an online store is $15.

Give the original price of the pair of shoes from the online store (i.e. BEFORE adding p&h costs).

[3] The price of a concert ticket goes up by 6% to a higher price of $25.

Give the original price of the concert ticket (i.e. BEFORE the increase).

[4] The cost of hiring a digger goes up to a higher price of $162 per hour.

This is a 7% increase in cost per hour.

Give the original cost per hour for hiring the digger (i.e. BEFORE adding the increase).

*Solve the percentage **decrease** problems below. Round answers to 2 d.p.*

[5] The price of a boat goes down by 20% to $13702

What was the price before?

[6] Calculate the original price of an article which costs $206 after a decrease of 10%

[7] Calculate the original price of an article which costs $438 after a discount of 91%

[8] Calculate the original price of an article which costs $249 after a discount of 36%

[9] After a decrease of 5% an item costs $24

What did this item cost before the drop in price?

ANSWERS

NUMBER: percentage changes

(Given an amount after a specific percentage change, calculate the original amount)

Date: **Name:**   *http://www.learnersgrid.com*

Solve the percentage increase problems below. Round answers to 2 d.p.

[1]   After adding a 13% sales tax, the new price for a book is $17.

Give the original price of the book (i.e. BEFORE adding the sales tax).

= **$ 15.04**

[2]   After adding 16% postage & handling costs, the total cost of a pair of shoes from an online store is $15.

Give the original price of the pair of shoes from the online store (i.e. BEFORE adding p&h costs).

= **$ 12.93**

[3]   The price of a concert ticket goes up by 6% to a higher price of $25.

Give the original price of the concert ticket (i.e. BEFORE the increase).

= **$ 23.58**

[4]   The cost of hiring a digger goes up to a higher price of $162 per hour.

This is a 7% increase in cost per hour.

Give the original cost per hour for hiring the digger (i.e. BEFORE adding the increase).

= **$ 151.40**

Solve the percentage decrease problems below. Round answers to 2 d.p.

[5]   The price of a boat goes down by 20% to $13702

What was the price before?

= **$ 17127.50**

[6]   Calculate the original price of an article which costs $206 after a decrease of 10%

= **$ 228.89**

[7]   Calculate the original price of an article which costs $438 after a discount of 91%

= **$ 4866.67**

[8]   Calculate the original price of an article which costs $249 after a discount of 36%

= **$ 389.06**

[9] After a decrease of 5% an item costs $24

       What did this item cost before the drop in price?   **= $ 25.26**