NUMBER: percentage changes

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

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

[1]   After adding a 6% 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 27% postage & handling costs, the total cost of a jacket from an online store is $25.

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

[3]   The price of a theatre ticket goes up by 6% to a higher price of $35.

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

[4]   The cost of hiring a digger goes up to a higher price of $142 per hour.

       This is a 12% 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 truck goes down by 12% to $14838

       What was the price before?

[6]   Calculate the original price of an article which costs $281 after a decrease of 32%

[7]   Calculate the original price of an article which costs $464 after a discount of 81%

[8]   Calculate the original price of an article which costs $615 after a discount of 25%

[9]   After a decrease of 14% an item costs $22

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 6% sales tax, the new price for a book is $17.

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

=   **$ 16.04**

[2]   After adding 27% postage & handling costs, the total cost of a jacket from an online store is $25.

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

=   **$ 19.69**

[3]   The price of a theatre ticket goes up by 6% to a higher price of $35.

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

=   **$ 33.02**

[4]   The cost of hiring a digger goes up to a higher price of $142 per hour.

This is a 12% increase in cost per hour.

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

=   **$ 126.79**

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

[5]   The price of a truck goes down by 12% to $14838

What was the price before?

=   **$ 16861.36**

[6]   Calculate the original price of an article which costs $281 after a decrease of 32%

=   **$ 413.24**

[7]   Calculate the original price of an article which costs $464 after a discount of 81%

=   **$ 2442.11**

[8]   Calculate the original price of an article which costs $615 after a discount of 25%

=   **$ 820.00**

[9] After a decrease of 14% an item costs $22

What did this item cost before the drop in price? = **$ 25.58**