

Subtracting - Columns

Learning Goal:

By the end of this lesson I should be able to SUBTRACT positive numbers using a Column Model, WITHOUT the use of a calculator (technology).

When we are asked to find the DIFFERENCE of two numbers, we are being asked to SUBTRACT or take away one number from the other.

Difference -> Subtract -> Take Away
(Similar meaning)

Find the SUM of $34 + 18$ (review)

CARRY OVER TENS ROW

CARRY OVER ONES ROW

$$\begin{array}{r} \text{CARRY OVER TENS ROW} \\ \text{CARRY OVER ONES ROW} \\ \begin{array}{r} 34 \\ + 18 \\ \hline \end{array} \\ \text{HUNDREDS} \quad \text{TENS} \quad \text{ONES} \end{array}$$

Find the difference of the following:

$$35 - 24$$

Number Model

$$35 + (-24)$$

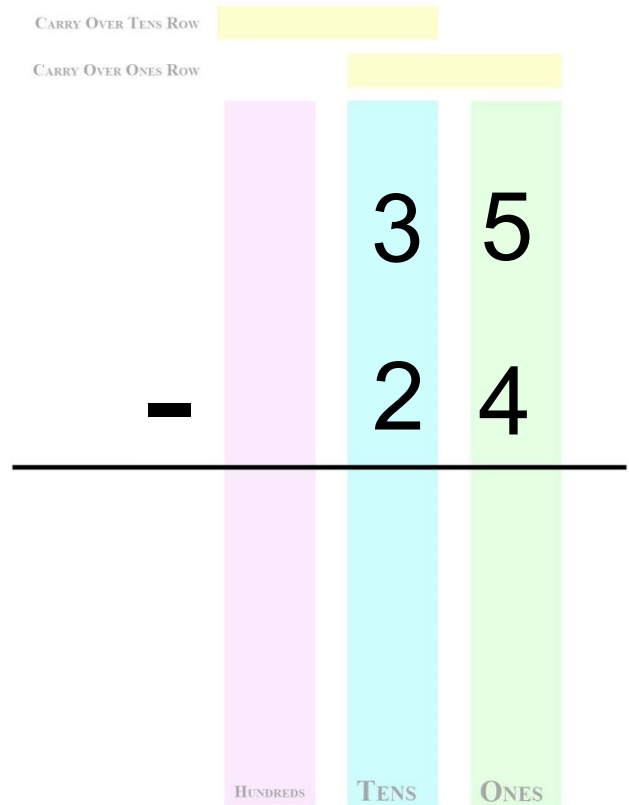
$$= 30 + 5 + (-20) + (-4)$$

$$= 30 + (-20) + 5 + (-4)$$

$$= 10 + 1$$

$$= 11$$

Column Model



(single digits in each column only)

Find the difference of the following:

$$22 - 7$$

Number Model

$$22 + (-7)$$

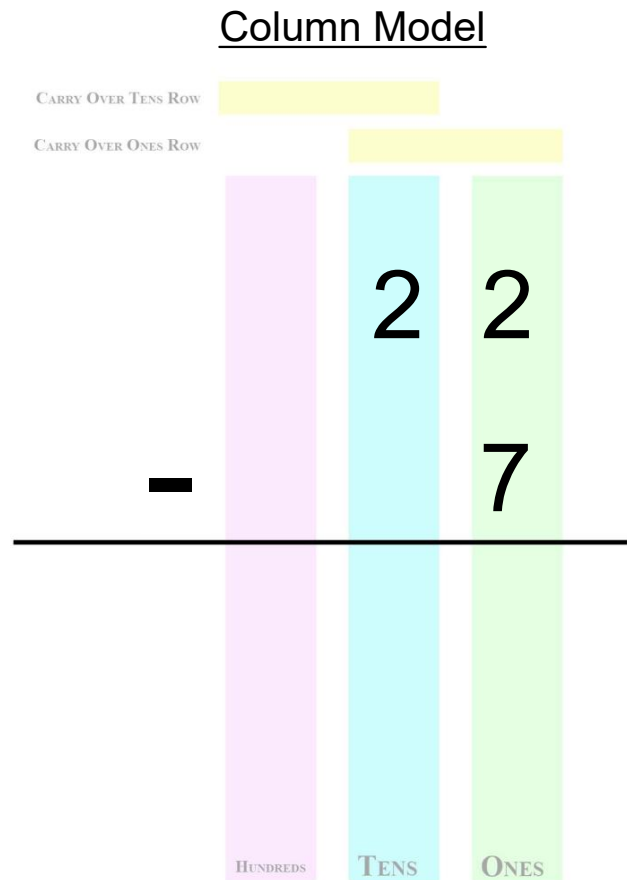
$$= 20 + 2 + (-7)$$

$$= 10 + 10 + 2 + (-7)$$

$$= 10 + 12 + (-7)$$

$$= 10 + 5$$

$$= 15$$



Find the difference of the following:

$$45 - 28$$

Number Model

$$45 + (-28)$$

$$= 40 + 5 + (-20) + (-8)$$

$$= 40 + (-20) + 5 + (-8)$$

$$= 30 + (-20) + 15 + (-8)$$

$$= 10 + 15 + (-8)$$

$$= 10 + 7$$

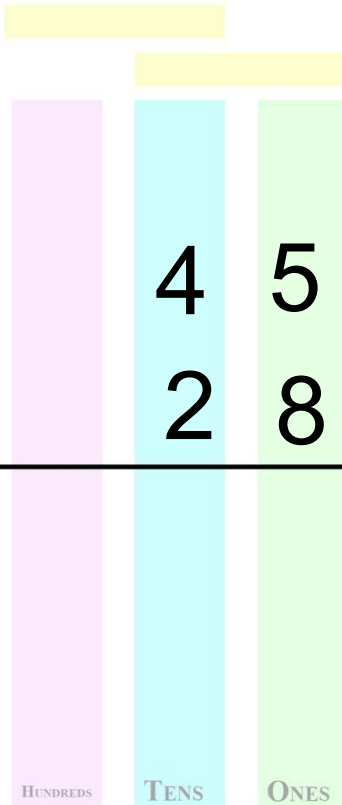
$$= 17$$

Column Model

CARRY OVER TENS ROW

CARRY OVER ONES ROW

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(single digits in each column only)

Find the difference of the following:

$$742 - 387$$

Number Model

$$742 + (-387)$$

$$= 700 + 40 + 2 + (-300) + (-80) + (-7)$$

$$= 700 + (-300) + 40 + (-80) + 2 + (-7)$$

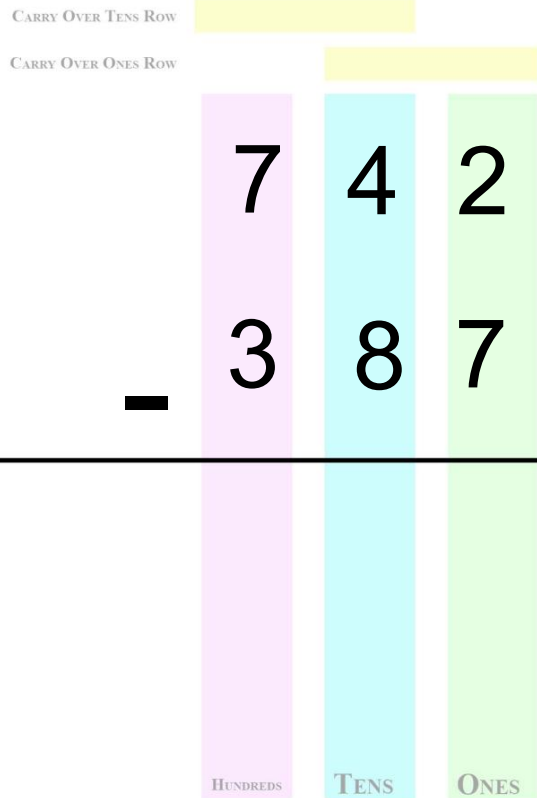
$$= 600 + (-300) + 140 + (-80) + 2 + (-7)$$

$$= 600 + (-300) + 130 + (-80) + 12 + (-7)$$

$$= 300 + 50 + 5$$

$$= 355$$

Column Model



(single digits in each column only)

Press PAUSE on the video and try the following
Find the Difference for the following:

$$\begin{array}{r} 61 \\ - 27 \\ \hline \end{array}$$

$$\begin{array}{r} 314 \\ - 289 \\ \hline \end{array}$$

Task 1.7