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## RELATE ADDITION AND SUBTRACTION LENGTHS

Concrete to abstract measuring the lengths of string using measurement tools represent length with tape diagrams to represent and compare lengths.

1) Use a string to measure all three lines.

Line 1:

___ centimeters.
Line 2:

centimeters.
Line 3:
$\qquad$ centimeters.

Which line is the longest? $\qquad$ .

Which line is the shortest? $\qquad$ .

Draw a tape diagram to compare two of the lengths.
Comparing the lengths of line 1 and $3=15-11=$ $\qquad$ centimeters.

By tape diagram:

| 15 | -10 |  | -1 |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

Difference in lengths between 15 and 11 is $\qquad$ centimeters.
2) Measure the two lines below.
a) Line $A$ is $\qquad$ centimeters.
b) Line B is $\qquad$ centimeters.

Line A: $\qquad$

Line B:
c) Together, line $A$ and $B$ measure $\qquad$ centimeters.
d) Line $A$ is $\qquad$ centimeters (shorter / longer) than line $B$.

