

ADDING DOUBLE-DIGIT NUMBERS

(The units of these numbers are assumed to be the same.)

FACT 1: We may add two double-digit numbers by separately adding the TENS and the ONES first.

$$43 + 25 \rightarrow 60 + 8 \rightarrow 68$$

Add 49 and 26: Add the tens (40 and 20) first to 60.
Add the ones (3 and 5) next to 8.
Add 8 to 60. The total is 68.

$$33 + 28 \rightarrow 50 + 11 \rightarrow 60 + 1 \rightarrow 61$$

Add 33 and 28: Add the tens (30 and 20) first to 50.
Add the ones (3 and 8) next to 11.
Add 11 to 50 by adding 10 and 1.
The total is 61.

$$57 + 38 \rightarrow 80 + 15 \rightarrow 90 + 5 \rightarrow 95$$

Add 57 and 35: Add the tens (50 and 30) first to 80.
Add the ones (7 and 8) next to 15.
Add 15 to 80 by adding 10 and 5.
The total is 95.

FACT 2: Doubling is adding a number to itself. You may double two-digit numbers as above by separately doubling TENS and ONES first.

$$\text{Double of } 24 \rightarrow 24 + 24 \rightarrow 40 + 8 \rightarrow 48$$

$$\text{Double of } 37 \rightarrow 37 + 37 \rightarrow 60 + 14 \rightarrow 74$$

1. Add mentally by separately adding the TENS and the ONES first.

- (a) $33 + 28$ (b) $45 + 38$ (c) $36 + 28$ (d) $58 + 37$ (e) $51 + 74$
(f) $37 + 44$ (g) $47 + 56$ (h) $47 + 23$ (i) $64 + 27$ (j) $68 + 38$

(Check your answers using a calculator)

2. Drill adding two double-digit numbers as above.
3. Drill doubling two-digit numbers as above.

End of Lesson