# Day of the Week

DOTW (Day of the Week) math!

## Memorize the following numbers for each DOTW:

# DOTW BrainAid

0 Sunday Zero ~ Sun 🔆

1 Monday M'on'  $\sim$  'on'e

BrainAid
Memory Hint

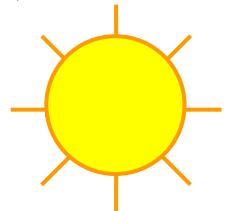
2 Tuesday Tue ~ Two

3 Wednesday Wed, nes, & day all have 3 letters

4 Thursday Th'ur' ~ Fo'ur'

5 Friday <u>Fri</u>~ <u>Fi</u>ve

6 Saturday Sat ~ Six



## TO DETERMINE A FUTURE DOTW

Add number of days, then subtract multiple of 7 so result is from 0 to 6.

## If sum is from 0 to 6, match number to DOTW:

What day is 4 days after Tuesday? 2 (Tue) + 4 days = 6 (Sat)

### If sum is from 7 to 13, subtract 7:

What day is 10 days after Monday? 1 (Mon) + 10 days = 11; 11 - 7 = 4 (Thu)

## If sum is from 14 to 20, subtract 14:

What day is 17 days after Wednesday? 3 (Wed) + 17 days = 20; 20 - 14 = 6 (Sat)

## If sum is from 21 to 27, subtract 21:

What day is 22 days after Thursday? 4 (Thu) + 22 days = 26; 26 - 21 = 5 (Fri)

### If sum is from 28 to 34, subtract 28:

What day is 30 days after Sunday? 0 (Sun) + 30 days = 30; 30 - 28 = 2 (Tue)

## TO DETERMINE A PAST DOTW

Subtract number of days, then add multiple of 7 so result is from 0 to 6.

## If difference is from 0 to 6, match number to DOTW:

What day is 4 days before Friday? 5 (Fri) - 4 days = 1 (Mon)

## If difference is from -1 to -7, add 7:

What day is 6 days before Monday? 1 (Mon) - 6 days = -5; -5 + 7 = 2 (Tue)

## If difference is from -8 to -14, add 14:

What day is 17 days before Wednesday? 3 (Wed) - 17 days = -14; -14 + 14 = 0 (Sun)

### If difference is from -15 to -21, add 21:

What day is 22 days before Thursday? 4 (Thu) - 22 days = -18; -18 + 21 = 3 (Wed)

## If difference is from -22 to -28, add 28:

What day is 24 days before Tuesday? 2 (Tue) - 24 days = -22; -22 + 28 = 6 (Sat)

### If difference is from -29 to -35, add 35:

What day is 30 days before Sunday? 0 (Sun) - 30 days = -30; -30 + 35 = 5 (Fri)

## **General Rule**

Subtract or add multiples of 7

 $7 \times 1 = 7$ 

 $7 \times 2 = 14$ 

 $7 \times 3 = 21$ 

 $7 \times 4 = 28$  $7 \times 5 = 35$ 

until you get a number between

0 and 6.

If result > 6 on first try, keep going:

What day is 40 days from Tuesday?

2 (Tue) + 40 days = 42 42 - 35 = 7

7 - 7 = 0 (Sun)

## **Exact Multiples**

If the days added or subtracted are an *exact* multiple of 7, the DOTW remains the same.

What day is 35 days from Friday?

5 (Fri) + 35 days = 4040 - 35 = 5 (Fri)