

Each version of unix handles timezones a little differently. Ignoring timezones more or less, this comes fairly close

Code:

```
#!/usr/bin/ksh

#
# convert unix time to a string
#
# time="$(unixsecond2timestring $seconds)" is
# similar to the c construct:
#     strcpy(time,ctime(&xdate));
# except that it ignores timezone considerations.
# This means that it is exactly like:
#     strcpy(time,asctime(gmtime(&xdate)));
#
# The only way to handle timezones is to figure out
# your local number of seconds difference from GMT and
# adjust the value of seconds before passing it. This
# means that for small values of "seconds" you may adjust
# it to a negative number. That's ok, this routine can
# handle numbers in the range -86400 to 2147483647.
#
unixsecond2timestring() {
    integer uxsec mjd daysecond hour hoursecond minute second
    typeset -Z2 val
    typeset -R2 val2
    typeset -L3 fdow
    typeset dow time year month day
    typeset months
    set -A months xxx Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
    uxsec=$1

#
# Calculate
# mjd=modified julian day number (range is 40586 - 65442)
# Dec 31, 1969 has mjd=40586
# Jan 19, 2038 has mjd=65442
# daysecond=number of second during the day (range is 0 - 86399)
# hoursecond=number of second during hour (range is 0 - 3599)
# hour, minute, second represent current time
#
    ((mjd=(uxsec/86400)+40587))
    ((daysecond=uxsec%86400))
    ((hour=daysecond/3600))
    ((hoursecond=daysecond-(hour*3600)))
    ((minute=hoursecond/60))
    ((second=hoursecond%60))

#
# Adjust things if we are negative
# if ((uxsec<0)) ; then
#     ((mjd=mjd-1))
#     ((hour=(hour+24)%24))
# fi

#
# Convert mjd to year, month day and get dow (day of week)
# datecalc -j $mjd | read year month day
```

```

dow=$(datecalc -D $year $month $day)

#
# Format the date
val=$hour
time="{val}:"
val=$minute
time="{time}{val}:"
val=$second
time="{time}{val} $year"
fdow=$dow
val2=$day
time="{fdow} {months[month]} $val2 $time"
echo "$time"
return
}

integer unixsecond
typeset -R11 dsecond

while (($#) ; do
    unixsecond=$1
    shift
    time1=$(unixsecond2timestring $unixsecond)
    dsecond=$unixsecond
    ((unixsecond2=unixsecond-(5*3600)))
    time2=$(unixsecond2timestring $unixsecond2)

    print "arg = $dsecond   ${time1}   ${time2}"
done
exit 0

```