

CONVERSION FACTORS

$$1 \text{ year} = 12 \text{ months} = 52 \text{ weeks} = 365 \text{ days (366 days in a leap year)}$$

$$1 \text{ week} = 7 \text{ days}$$

$$1 \text{ day} = 24 \text{ h}$$

$$1 \text{ h} = 60 \text{ min} = 3600 \text{ s}$$

$$1 \text{ min} = 60 \text{ s}$$

Q. 6 h = min

A. $6 \text{ h} = 6 \times 60 \text{ min}$
 $= 360 \text{ min}$

$1 \text{ h} = 60 \text{ min}$

Because minutes are shorter units than hours you will need more of them, so multiply.

Q. How many weeks in 42 days?

A. $42 \text{ days} = \frac{42}{7} \text{ weeks}$
 $= 6 \text{ weeks}$

$1 \text{ week} = 7 \text{ days}$

Because weeks are longer units than days, you will need fewer of them, so divide.

a) $4 \text{ h} = 4 \times 60 \text{ min}$
 $= 240 \text{ min}$

b) $480 \text{ min} = \dots \text{ h}$
 $= \dots \text{ h}$

c) $1 \text{ day} = \dots \text{ min}$
 $= \dots \text{ min}$

d) $2 \text{ weeks} = \dots \text{ h}$
 $= \dots \text{ h}$

e) $5400 \text{ s} = \dots \text{ min}$
 $= \dots \text{ min}$

f) $15 \text{ min} = \dots \text{ s}$
 $= \dots \text{ s}$

g) $14,400 \text{ s} = \dots \text{ h}$
 $= \dots \text{ h}$

h) $63 \text{ days} = \dots \text{ weeks}$
 $= \dots \text{ weeks}$

i) $7 \text{ days} = \dots \text{ h}$
 $= \dots \text{ h}$

j) How many hours in 15 days?
 $15 \text{ days} = \dots \text{ h}$
 $= \dots \text{ h}$

k) How many months make 20 years?
 $20 \text{ years} = \dots \text{ months}$
 $= \dots \text{ months}$

l) How many hours in 300 minutes?
 $300 \text{ min} = \dots \text{ h}$
 $= \dots \text{ h}$

m) Salt Lake City winter Olympics were held in 2002. Was that a leap year? [Hint: Leap years are years that are divisible by 4.]
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n) On average, people can hold their breath for one minute. The world record is 8 min and 47 s. Express the record time in seconds.
 $8 \text{ min } 47 \text{ s} = \dots \text{ S}$
 $= \dots \text{ S}$

o) Yelling for 8 years, 7 months and 6 days, would produce enough sound energy to heat one cup of coffee. Is this more or less than 3000 days of yelling?
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