

Converting between units of time

CURRICULUM ALIGNMENT

MEA.TIM.4

solve and pose practical tasks and problems involving the interpretation and calculation of time.

NUM.OPS.4

build upon, select and make use of a range of operation strategies.

INTERACTIVES (Analog Clock Builder · display) (Function Machine · challenge, explore)

WHAT THIS LESSON TEACHES

60 seconds make a minute, 60 minutes make an hour, and 24 hours make a day.

→ A film that lasts 2 hours runs for 120 minutes.

→ $3 \text{ hours} \times 60 = 180 \text{ minutes}$.

MODEL THIS ON THE BOARD

CONVERT $2\frac{1}{2}$ HOURS TO MINUTES

- 1 Write 2 hours as $2 \times 60 = 120$ minutes.
- 2 Write the half hour as $\frac{1}{2} \times 60 = 30$ minutes.
- 3 Add the parts: $120 + 30 = 150$ minutes.

ANSWER KEY

Scaffold: visual check on the page

Q1: 300 minutes

Q2: 285 minutes

Q3: 180 minutes

Q4: 3 hours

Q5: 72 hours

a) Always : Because 2 times 60 equals 120.

b) Never : 1.5 hours is 1 hour 30 minutes, which is 90 minutes. Time does not work in tens.

c) Never : A quarter of 60 minutes is 15 minutes.

d) Always : $4 \times 24 = 96$.

EXTENSION SHEET · STRETCH ANSWERS

S1: 21:33