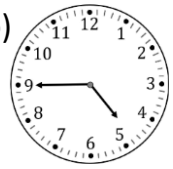
Time

Understand how to read time

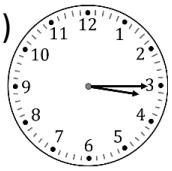
Question 1

Write down in words the time shown on each clock:

a)

b) 

c)

d) 

Question 2

How many seconds are there in:

a) 1 hour

b) 1 day

c) 1 week

Question 3

Convert each time to *hours/minutes* format

Example: 80 minutes = <u>1 hour 20 minutes</u>

b) 120 minutes

b) 90 minutes

c) 75 minutes

d) 450 minutes

e) 185 minutes

f) 119 minutes

Question 4

Convert each time to *hours/minutes* format e.g.

Example: 1.5 hours = <u>1 hour 30 minutes</u>

a) 0.5 hours

b) 1.25 hours

c) 3.75 hours

d) 2.1 hours

e) 5.3 hours

f) 1.05 hours

Question 5

Convert each time to 24 hour format.

Example: 3.30 p.m. = 15:30

a) 2 p.m

b) 8 a.m

c) 3.30 pm

d) 1.17 p.m.

e) 12.25 p.m.

f) 12.01 a.m.

Question 6

Convert each 24 hour time to a.m / p.m. format.

Example: 19:23 = 7.23 p.m.

a) 19:30

b) 06:29

c) 22:01

d) 23:59

e) 12:00

f) 00:00

Challenge

A light-year is defined as the distance light travels in one year.

Light travels 300 000 000 metres each second.

How many metres is one light year?

Time

Answers

Question 1
Write down in words the time shown on each clock:

a)

Two o'clock

b)

Quarter to five

c)

Ten to six

d)

Quarter past three

Question 2
How many seconds are there in:

c) 1 hour **3600**

b) 1 day **86 400**

c) 1 week **604 800**

Question 3
Convert each time to *hours/minutes* format

Example: 80 minutes = <u>1 hour 20 minutes</u>

d) 120 minutes
2 hours

b) 90 minutes
1 hour 30 minutes

c) 75 minutes
1 hour 15 minutes

d) 450 minutes
7 hours 30 minutes

e) 185 minutes
3 hours 5 minutes

f) 119 minutes
1 hour 59 minutes

Question 4
Convert each time to *hours/minutes* format e.g.

Example: 1.5 hours = <u>1 hour 30 minutes</u>

b) 0.5 hours
30 minutes

b) 1.25 hours
1 hour 15 minutes

c) 3.75 hours
3 hour 45 minutes

d) 2.1 hours
2 hours 6 minutes

e) 5.3 hours
5 hour 18 minutes

f) 1.05 hours
1 hour 3 minutes

Question 5

Convert each time to 24 hour format.

Example: 3.30 p.m. = 15:30

a) 2 p.m
14:00

b) 8 a.m
08:00

c) 3.30 pm
15:30

d) 1.17 p.m.
13:17

e) 12.25 p.m.
12:25

f) 12.01 a.m.
00:01

Question 6

Convert each 24 hour time to a.m / p.m. format.

Example: 19:23 = 7.23 p.m.

b) 19:30
7:30 p.m.

b) 06:29
6:29 a.m.

c) 22:01
10:01 p.m.

d) 23:59
11:59 p.m.

e) 12:00
12:00 p.m.

f) 00:00
12:00 a.m.

Challenge

A light-year is defined as the distance light travels in one year.

Light travels 300 000 000 metres each second.

How many metres is one light year?

300 000 000 x 60 x 60 x 24 x 365

≈ 9 500 000 000 000 000 metres

Circle Theorems

Answers

a = 55°. Angle at the centre is twice as big as the angle at the circumference.

b = 90°. Angle in a semi-circle is a right angle.

c = 46° . Angles in the same segment are equal.

d = 89° . Opposite angles in a cyclic quadrilateral have a sum of 180°.

e = 90° . Angle between a radius and tangent is a right angle.

f = 90° . Perpendicular bisector of a chord passes through the centre of the circle.

g = 130° . Tangents from the same point are of equal length.

h = 70^{o} . Angles in alternate segments are equal.