

Geometry, Measurement, and Word Problems

Measure the Universe!

Name:

Date:

Section 1: Lines, Angles, and Shapes

Use degrees to name each angle.

Example

An angle of 90° is a right angle. Less than 90° is acute. More than 90° and less than 180° is obtuse.

- a) What kind of angle is 45° ?
- b) What kind of angle is 120° ?
- c) A quarter turn is how many degrees?
- d) Lines that never cross are called lines.
- e) A triangle with one 90° angle is called a triangle.



Section 2: Perimeter and Area

Find the perimeter and the area of each rectangle.

Example

A rectangle is 12 feet long and 5 feet wide.

Perimeter: $2 \times (12 + 5) = 34$ feet. Area: $12 \times 5 = 60$ square feet.

a) 8 ft by 3 ft

Perimeter

Area

b) 10 m by 6 m

Perimeter

Area

c) 9 in by 9 in

Perimeter

Area

d) 15 cm by 4 cm

Perimeter

Area

e) 14 yd by 7 yd

Perimeter

Area



Geometry, Measurement, and Word Problems

Measure the Universe!

Section 3: Convert Units

Use the reference to change the unit.

1 km = 1,000 m 1 hour = 60 min 1 kg = 1,000 g 1 m = 100 cm 1 min = 60 sec

Example 3 km = 3,000 m, because $3 \times 1,000 = 3,000$.

- a) 4 km = m
- b) 2 hours = minutes
- c) 5 kg = g
- d) 3 m = cm
- e) 7 minutes = seconds

Section 4: Word Problems

Read carefully. Show your work, then write the answer.

Example A rocket pad is 12 feet long and 5 feet wide. How much fence goes around it? $2 \times (12 + 5) = 34$ feet.

- a) A space banner is 9 feet long and 4 feet wide. How many square feet of cloth does it need?

square feet

- b) A rover drove 3 km in the morning and 450 m in the afternoon. How many meters did it drive in all?

meters

- c) A landing pad is 20 meters long and 8 meters wide. How much fence goes around it?

meters

- d) A moon class lasts 2 hours and 15 minutes. How many minutes is that?

minutes

- e) A square solar panel has sides of 7 feet. What are its perimeter and area?

Perimeter Area



Geometry, Measurement, and Word Problems

Answer Key



Teacher Copy



Section 1: Lines, Angles, and Shapes

- a) acute b) obtuse c) 90° d) parallel e) right



Section 2: Perimeter and Area

- a) Perimeter 22 ft, Area 24 sq ft
b) Perimeter 32 m, Area 60 sq m
c) Perimeter 36 in, Area 81 sq in
d) Perimeter 38 cm, Area 60 sq cm
e) Perimeter 42 yd, Area 98 sq yd

Section 3: Convert Units

- a) 4,000 b) 120 c) 5,000 d) 300 e) 420



Section 4: Word Problems

- a) 36 square feet
b) 3,450 meters
c) 56 meters
d) 135 minutes
e) Perimeter 28 ft, Area 49 sq ft

