Volume of a Cylinder

Confidence Builders

1. Find the area of these circles. Give your answers to 1 decimal place.

a) 3cm

b) 1cm

c) 4cm

d) 2.5cm

e) 50cm

f) 4.8cm

g) 12.8cm

h) 7.26cm
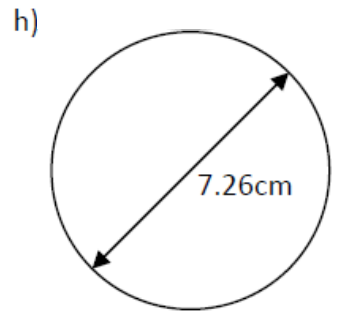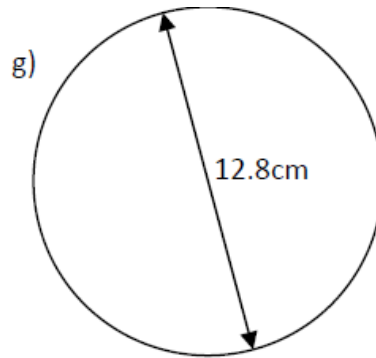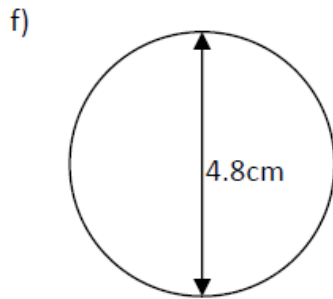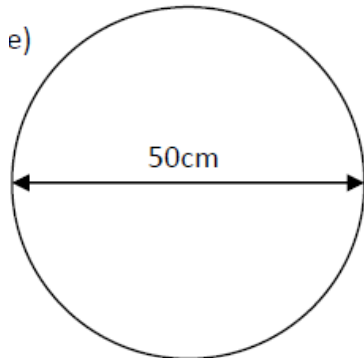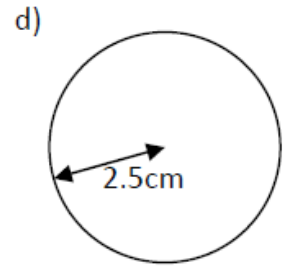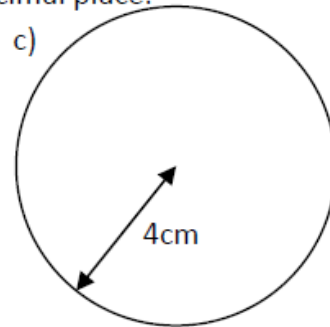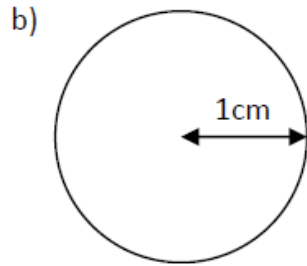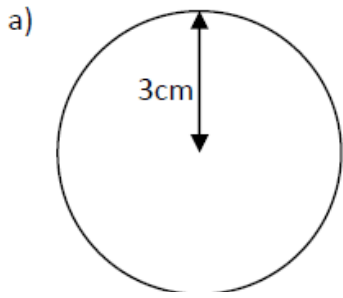
Extending Knowledge- Find the volume of the following cylinders, round to 1dp:

a) 4 cm, 8 cm

b) 10 cm, 14 cm

c) 6 cm, 12 cm

d) 7 cm, 11 cm

e) 5.5 cm, 10 cm

f) 12.5 cm, 11.5 cm

g) 12 cm, 10 cm

h) 20 cm, 1.2m
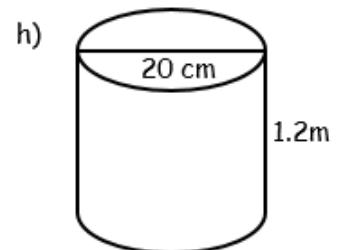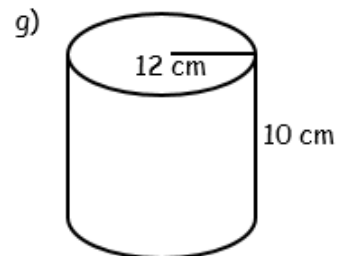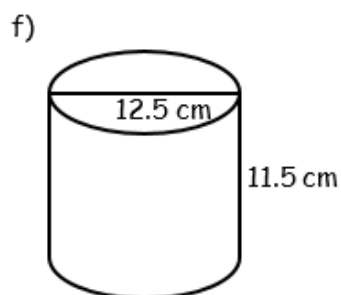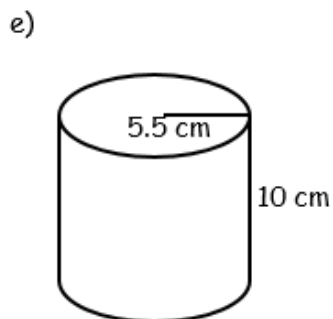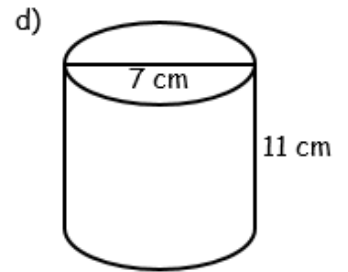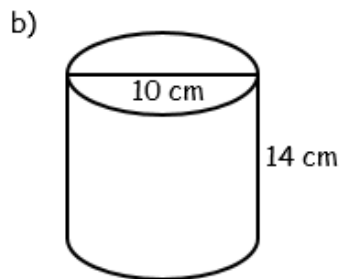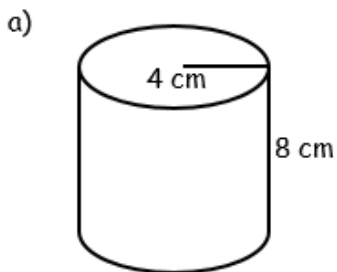
Challenge- Find the missing lengths. Round your answer to the nearest whole number:
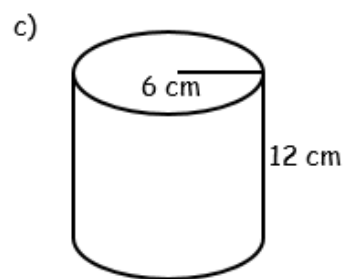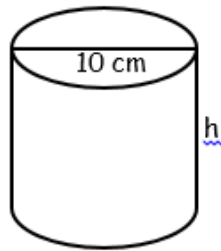
a)
Volume = 64 cm³
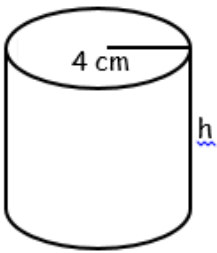
4 cm

h

b)
Volume = 300 cm³

10 cm
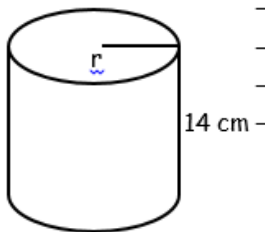
h

c)
Volume = 224 cm³

3 cm

h

l

d)
Volume = 540 cm³

20 cm

h

e)
Volume = 1360 cm³

r

14 cm –

f)
Volume = 420 cm³

d cm

11cm
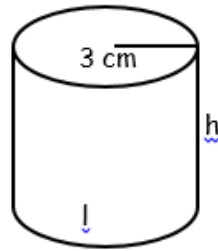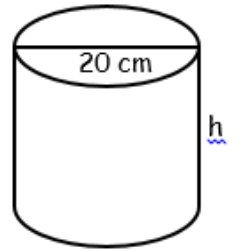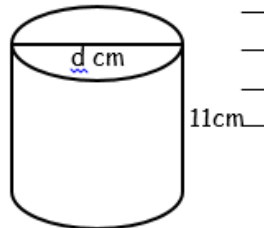
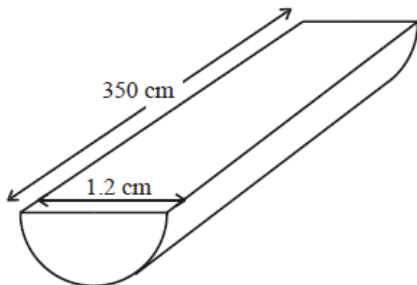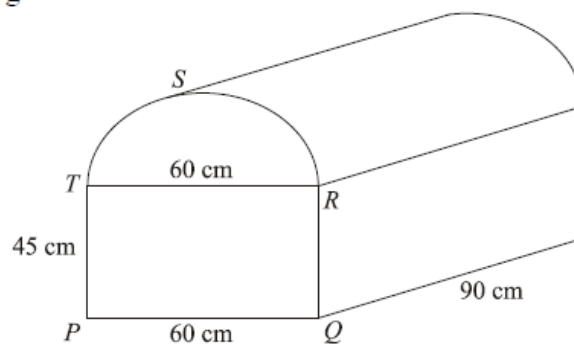⭐ Superstar Challenge ⭐

350 cm

1.2 cm

Diagram **NOT** accurately drawn

The diagram shows a piece of wood.
The piece of wood is a prism of length 350 cm.
The cross-section of the prism is a semi-circle with diameter 1.2 cm.

Calculate the volume of the piece of wood.
Give your answer correct to 3 significant figures.

S

60 cm

T

R

45 cm

90 cm

Calculate the volume of the prism.
Give your answer correct to 3 significant figures.
State the units of your answer.

P   60 cm   Q

Diagram **NOT** accurately drawn