#40

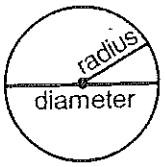
Name _____

Circumference and Area of Circles

Show all work on paper provided!!!

Remember

1. **Circumference** is the distance around a circle. Think of it as the circle's perimeter.



Circumference = π x diameter

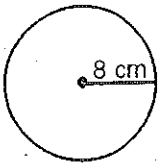
$C = \pi d$ or $C = 2\pi r$ (The diameter is twice the length of the radius: $d = 2r$.)

formula

2. **Area** is the measure in square units of the interior of a circle.

Area = π x radius x radius $A = \pi r^2$ formula

Example: Find the circumference and area of this circle. Use 3.14 as an approximation for π.



$C = 2\pi r$
$\approx 2 \cdot 3.14 \cdot 8$
≈ 50.24
≈ 50 cm

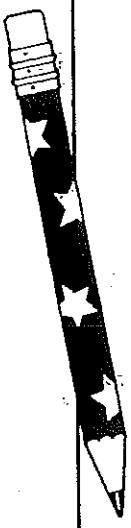
$A = \pi r^2$
$\approx 3.14 \cdot 8^2$
≈ 200.96
≈ 201 cm^2

Read directions

Draw straight lines to match each radius of a circle to its correct circumference and area. Use 3.14 for π. Write the uncrossed letters in the empty circles below to answer the riddle.

Round to nearest whole #. Show all work on provided paper.

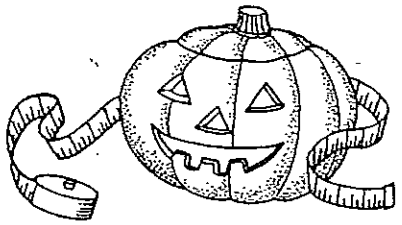
Use a ruler!

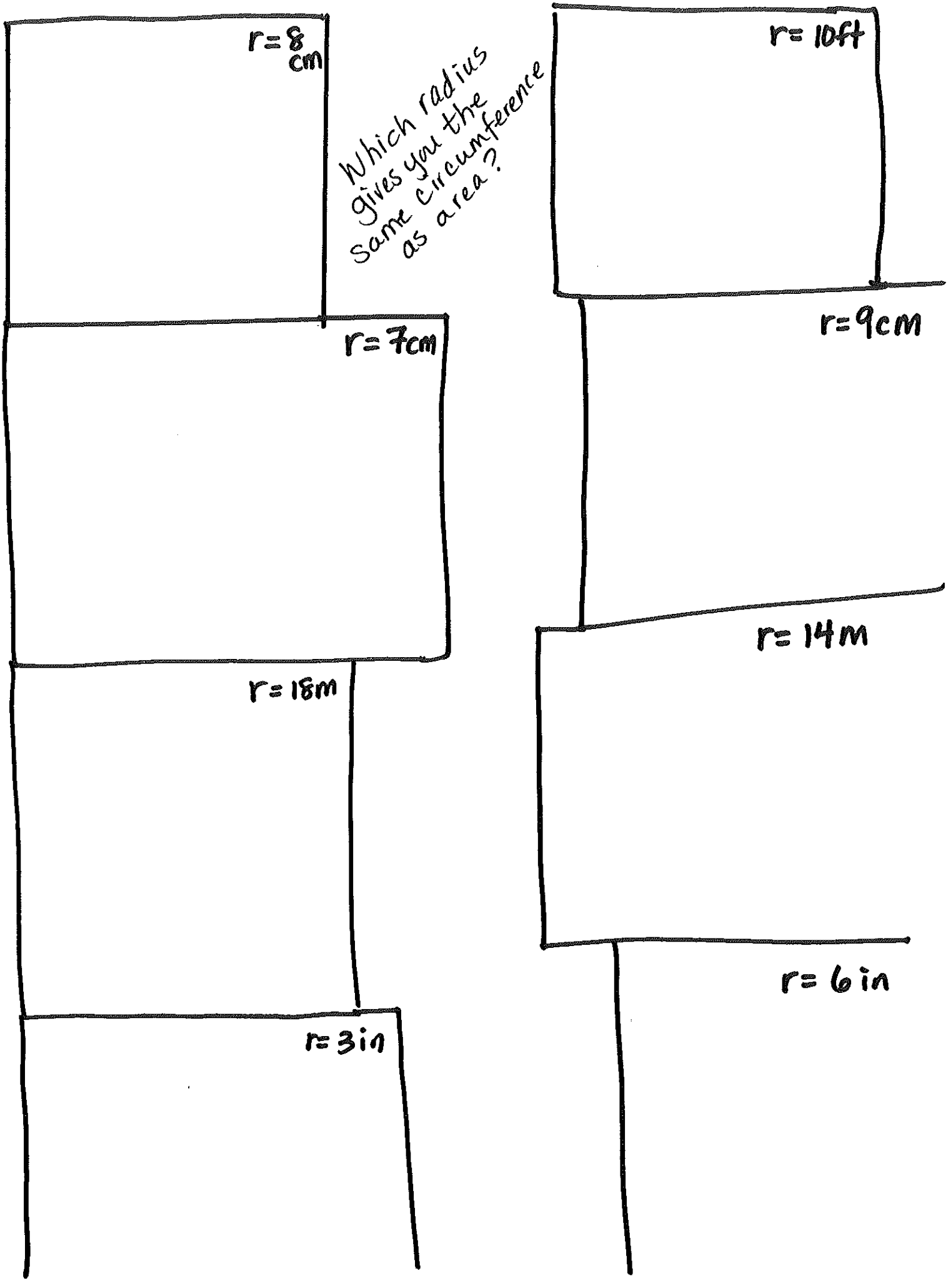


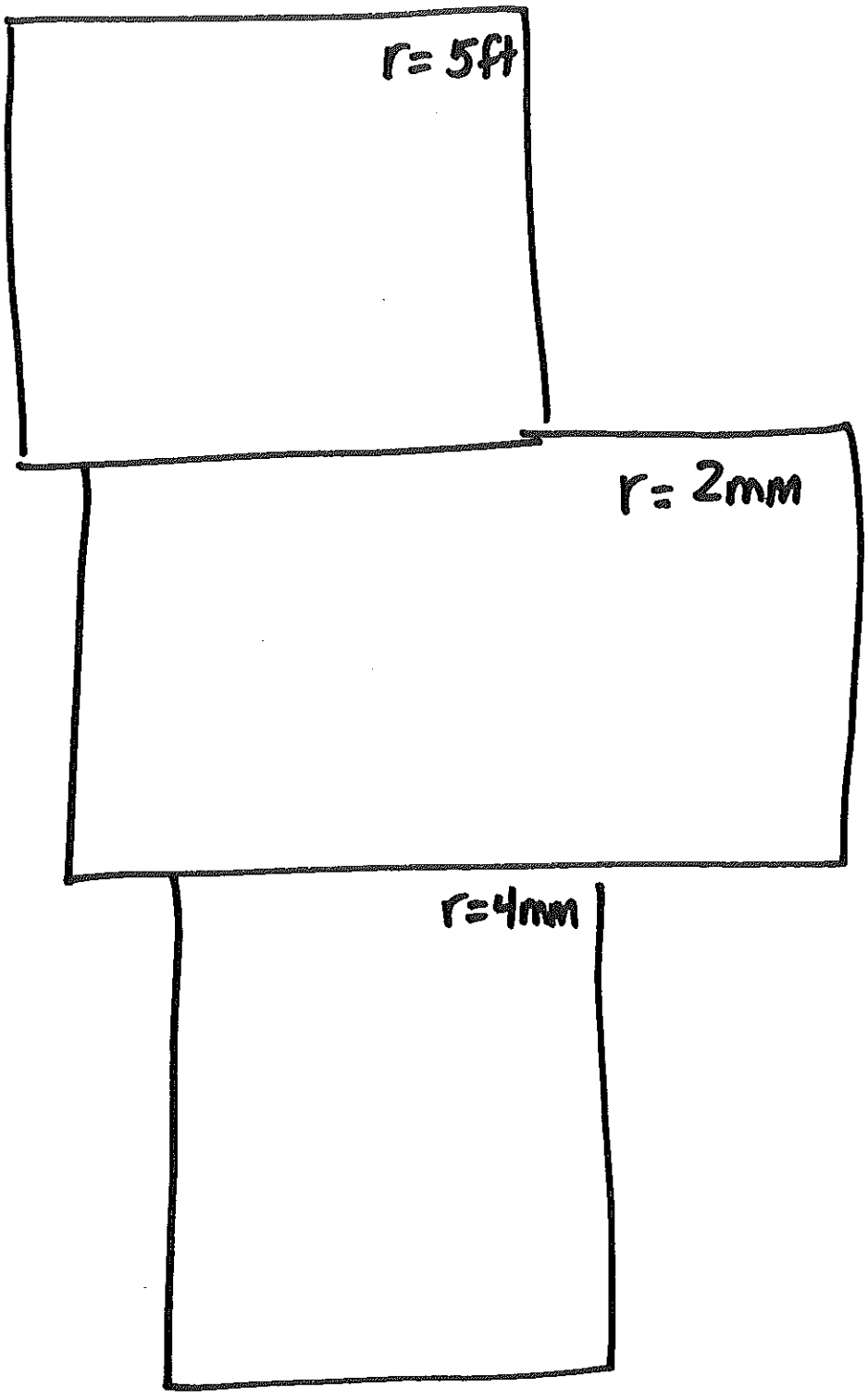
Circumference	Radius	Area
57 cm	8 cm	28 in.^{2}
113 m	7 cm	254 cm^2
50 cm	18 m	79 ft^2
38 in.	3 in.	1,017 m^2
31 ft	10 ft	314 ft^2
25 mm	9 cm	201 cm^2
44 cm	14 m	113 in.^{2}
88 m	6 in.	154 cm^2
19 in.	5 ft	50 mm^2
13 mm	2 mm	13 mm^2
63 ft	4 mm	615 m^2

P U I H A M A C L M N L D O P P I T E W K

What do you get when you take the circumference of a jack-o'-lantern and divide it by its diameter?




r= 8 cm
Which radius gives you the same circumference as area?
r= 10ft
r= 7cm
r= 9cm
r= 18m
r= 14m
r= 3in
r= 6in


r= 5ft
r= 2mm
r=4mm