



GRADE 7 · GEOMETRY · PRACTICE

CIRCUMFERENCE OF A CIRCLE

Today's goal: I can find the circumference of a circle to solve problems, including by using the formula for circumference.



Pick your peppers!

Everyone does Mild & Medium. Then climb as high as you can.



Mild

Tan the Turtle



Medium

Digit the Fox



Spicy

Blaze the Dragon

WATCH MR DJ SOLVE

Find its diameter.

1 $d = 2r = 20$ cm, which is the coefficient of π .

Answer: **20 cm**



REMEMBER $C = 2\pi r$ from a radius. $C = \pi d$ from a diameter. One formula in two costumes, since $d = 2r$. Reading backwards: if $C = k\pi$, then the diameter is k and the radius is $k \div 2$.



MILD

Tan the Turtle: Slow and steady. Warm up!

1 Find the circumference of a circle with radius 7 cm.

Answer

2 Find the circumference of a circle with diameter 7 cm.

Answer



OOPS ALERT

Careful on #1! The slip Mr DJ sees most: Answered 7π .



MEDIUM

Digit the Fox: Stretch your brain.

- 3 Find the circumference of a circle with diameter 14 cm. Compare it with question 1.

Answer

- 4 Find the circumference of a circle with radius 2.5 m.

Answer

- 5 A circle has circumference 20π cm. Find its radius.

Answer

- 6 Find the length of the curved edge of a semicircle with radius 6 cm.

Answer



SPICY

Blaze the Dragon: Bring the heat!

7 Your answers to 1 and 2 differ. Explain why, given that both mention 7.

Answer

8 Explain why the perimeter of that semicircle is NOT just your answer to question 6.

Answer



How did this sheet feel?

☐ Easy for me ☐ Just right ☐ Made me think

Stuck? Watch Mr DJ explain it

Step-by-step video lessons on YouTube: [youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

Three new math puzzles every day, free: puzzles.mathwithmrdj.com