



GRADE 5 · NUMBER & OPERATIONS IN BASE TEN · PRACTICE

ROUNDING DECIMALS

Today's goal: I can use place-value understanding to round decimals to any place.

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



Extra Spicy

Pi the Owl

WATCH MR DJ SOLVE

Round to the nearest whole number: 8.5, 0.49, 19.62.

- 1 8.5 is exactly halfway between 8 and 9 — up by agreement, 9.
- 2 0.49 is between 0 and 1, midpoint 0.5, below it — 0.
- 3 19.62 is between 19 and 20, midpoint 19.5, past it — 20.

Answer: 9, 0 and 20



REMEMBER

Which two are you between, and which are you nearer? One decision, made once, from the original number. Keep the place you rounded to.



MILD

Tan the Turtle: Slow and steady. Warm up!

- 1 Round to the nearest tenth: 2.47, 0.83, 5.05.

Answer

- 2 Round to the nearest hundredth: 0.416, 3.798, 12.005.

Answer

**OOPS ALERT**

Careful on #1! The slip Mr DJ sees most: Answered 2.5, 0.9, 5.1 — the 0.83 rounded up, most often by looking at the 3 and treating any following digit as a reason to move. 0.83 is below 0.85, so it stays at 0.8.

**MEDIUM**

Digit the Fox: Stretch your brain.

- 3 A shelf is 1.96 m long. Round it to the nearest tenth of a metre, and write the answer with its unit.

Answer

- 4 Write a decimal with three decimal places that rounds to 0.6 to the nearest tenth but to 0.56 to the nearest hundredth.

Answer

**SPICY**

Blaze the Dragon: Bring the heat!

- 5 Round 0.749 to the nearest tenth. Then round 0.741 to the nearest tenth. Should they be the same?

Answer

- 6 Round 4.297 to the nearest tenth. Then check it by rounding to the nearest hundredth first. Do the two routes agree?

Answer

- 7 8.5 rounded to the nearest whole is 9. Is 8.5 actually nearer to 9 than to 8? Explain your answer.

Answer



EXTRA SPICY

Pi the Owl: Big-brain challenge.

- 8 Why is “look at the digit to the right; 5 or more rounds up” not enough on its own?

Answer



How did this sheet feel?



Easy for me



Just right



Made me think

Stuck? Watch Mr DJ explain it

“How to Write Decimals in Word Form (Place Value, Expanded Form & Rounding)” on YouTube: [youtube.com/@MathWithMrDJ](https://www.youtube.com/@MathWithMrDJ)

Brain break: daily puzzles

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