

**GRADE 6 · THE NUMBER SYSTEM · PRACTICE****ABSOLUTE VALUE****Today's goal:** I can demonstrate understanding of absolute value of rational numbers.**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**Find $|0|$. Explain your answer.**

- 1 Zero is zero units from itself.
- 2 Distance of 0 is 0.

Answer: **0****REMEMBER** **$|x|$ = distance from zero.** Distance is never negative, so an absolute value is never negative. $|-9| = 9$. $|9| = 9$. $|0| = 0$. Careful: a bigger absolute value does NOT mean a bigger number when negatives are involved.**MILD****Tan the Turtle:** Slow and steady. Warm up!

- 1 Find $|-9|$.

Answer

- 2 Find $|12|$.

Answer

**OOPS ALERT****Careful on #1!** The slip Mr DJ sees most: Answered -9 .

**MEDIUM****Digit the Fox:** Stretch your brain.**3** Find $|-1\frac{1}{2}|$.

Answer

4 Find $|-4.6|$.

Answer

5 Which has the greater absolute value: -7 or 3 ? Which is the greater number? Answer both.

Answer

**SPICY****Blaze the Dragon:** Bring the heat!**6** A diver is at -30 m and a bird is at -10 m relative to sea level. Whose position has the greater absolute value, and who is higher? Explain.

Answer

7 Explain why -6 and 6 have the same absolute value but are not the same number.

Answer



EXTRA SPICY

Pi the Owl: Big-brain challenge.

- 8 Jordan writes $|-8| = -8$. Explain his error and give the correct value.

Answer



How did this sheet feel?

☐

Easy for me

☐

Just right

☐

Made me think

Stuck? Watch Mr DJ explain it

"Absolute Value Explained Step by Step" on YouTube:
youtube.com/@MathWithMrDJ

Brain break: daily puzzles

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