

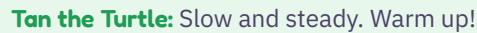
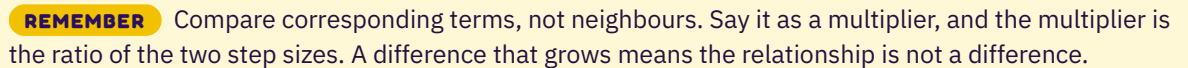


Date _____

GRADE 5 • OPERATIONS & ALGEBRAIC THINKING • PRACTICE

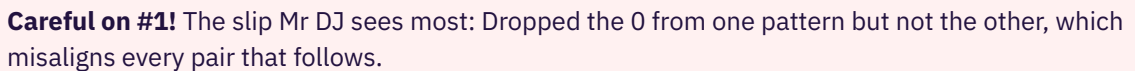
Today's goal: I can generate two numerical patterns and identify relationships between them.

Pi the Owl



1 Write the first five terms of “start at 0, add 2” and of “start at 0, add 8”.

Answer





MEDIUM

Digit the Fox: Stretch your brain.

- 2 How does the second pattern in item 1 compare with the first? Test your answer on two different pairs.

Answer

- 3 Write the ordered pairs for item 1, and describe what they would look like plotted.

Answer

- 4 The 10th term of “start at 0, add 3” is 27. Find the 10th term of “start at 0, add 9” without writing out the pattern.

Answer

- 5 Two rules are “add 5” and “add 20”, both from 0. Say the relationship before writing any terms, then check it.

Answer



SPICY

Blaze the Dragon: Bring the heat!

- 6 For “add 3” and “add 9” from 0, write the difference between each pair of corresponding terms. What does a growing difference tell you?

Answer

- 7 Now start both patterns at 1: add 3 gives 1, 4, 7, 10, 13 and add 9 gives 1, 10, 19, 28, 37. Is the second still three times the first? Check two pairs.

Answer

- 8 Why did starting at 0 make the “three times” relationship work, when starting at 1 does not?

Answer



EXTRA SPICY

Pi the Owl: Big-brain challenge.

- 9 How is “the second pattern is 6 more” the same mistake as reading “4 times as many” as “4 more”?

Answer



How did this sheet feel?



Easy for me



Just right



Made me think

Stuck? Watch Mr DJ explain it

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