

ALGEBRA

Lesson 3.10

Name _____

Patterns with Decimals

COMMON CORE STANDARD CC.5.NBT.7

Perform operations with multi-digit whole numbers and with decimals to hundredths.

Write a rule for the sequence. Then find the unknown term.

1. 2.6, 3.92, 5.24, **6.56**, 7.88

Think: $2.6 + ? = 3.92$; $3.92 + ? = 5.24$

$$2.6 + 1.32 = 3.92$$

$$3.92 + 1.32 = 5.24$$

Rule: _____ **add 1.32** _____

2. 25.7, 24.1, _____, 20.9, 19.3

Rule: _____

3. 14.33, 13.22, 12.11, 11.00, _____

Rule: _____

4. 1.75, _____, 6.75, 9.25, 11.75

Rule: _____

Write the first four terms of the sequence.

5. Rule: start at 17.3, add 0.9

6. Rule: start at 28.6, subtract 3.1

Problem Solving

7. The Ride-It Store rents bicycles. The cost is \$8.50 for 1 hour, \$13.65 for 2 hours, \$18.80 for 3 hours, and \$23.95 for 4 hours. If the pattern continues, how much will it cost Nate to rent a bike for 6 hours?

8. Lynne walks dogs every day to earn money. The fees she charges per month are 1 dog, \$40; 2 dogs, \$37.25 each; 3 dogs, \$34.50 each; 4 dogs, \$31.75 each. A pet store wants her to walk 8 dogs. If the pattern continues, how much will Lynne charge to walk each of the 8 dogs?

Lesson Check (CC.5.NBT.7)

- A store has a sale on books. The price is \$17.55 for one book, \$16.70 each for 2 books, \$15.85 each for 3 books, and \$15 each for 4 books. If this pattern continues, how much will it cost to buy 7 books?
 - (A) \$14.15 each
 - (B) \$13.30 each
 - (C) \$13.15 each
 - (D) \$12.45 each
- A bowling alley offers special weekly bowling rates. The weekly rates are 5 games for \$15, 6 games for \$17.55, 7 games for \$20.10, and 8 games for \$22.65. If this pattern continues, how much will it cost to bowl 10 games in a week?
 - (A) \$25.20
 - (B) \$27.75
 - (C) \$28.20
 - (D) \$37.95

Spiral Review (CC.5.NBT.5, CC.5.NBT.6, CC.5.NBT.7)

- Find the product. (Lesson 1.7)

$$\begin{array}{r} 284 \\ \times 36 \\ \hline \end{array}$$
 - (A) 2,556
 - (B) 7,704
 - (C) 9,224
 - (D) 10,224
- At a sale, a shoe store sold 8 pairs of shoes for a total of \$256. Each pair cost the same amount. What was the price of each pair of shoes? (Lesson 2.2)
 - (A) \$22
 - (B) \$32
 - (C) \$248
 - (D) \$2,048
- Marcie jogged 0.8 mile on Wednesday and 0.9 mile on Thursday. How far did she jog altogether? (Lesson 3.8)
 - (A) 0.1 mile
 - (B) 0.17 mile
 - (C) 1.1 miles
 - (D) 1.7 miles
- Bob has 5.5 cups of flour. He uses 3.75 cups of flour. How much flour does Bob have left? (Lesson 3.9)
 - (A) 2.75 cups
 - (B) 2.25 cups
 - (C) 1.75 cups
 - (D) 1.25 cups